

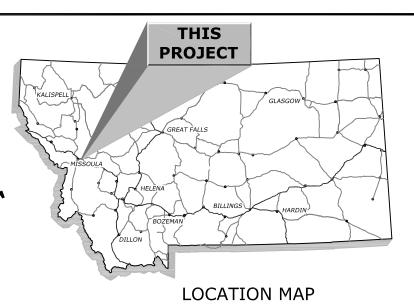
MONTANA FISH, WILDLIFE & PARKS HELENA, MT.

CONSTRUCTION PLANS FOR:

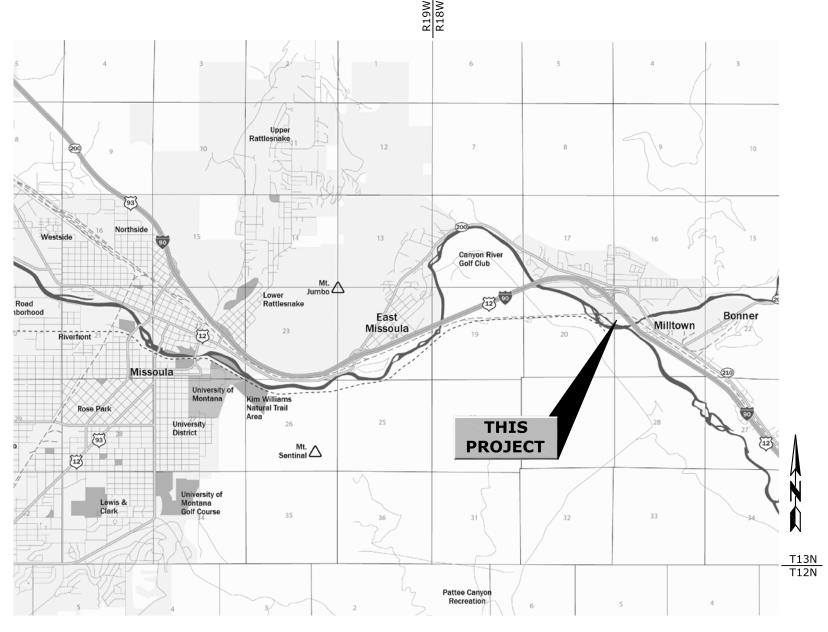
MILLTOWN STATE PARK

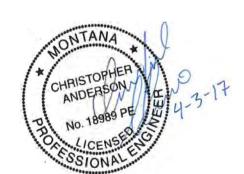
ROADS, TRAILS & PARKING AREA DEVELOPMENT

BONNER, MONTANA MISSOULA COUNTY, MONTANA



INI	DEX TO SHEETS
NO.	DESCRIPTION
1	COVER SHEET
2	GENERAL NOTES, LEGEND, & SYMBOLS
3	SITE PLAN OVERVIEW
4	SUMMARY OF EST. QUANTITIES
5-6	PROJECT CONTROL POINTS
7-11	TYPICAL SECTIONS
12	TEMP CONSTRUCTION ACCESS ROAD P&P
13-17	ACCESS ROAD PLAN & PROFILE
18-25	PARKING LOT A
26	GATEWAY ACCESS ROAD P&P
27-30	GATEWAY PARKING LOT
31-36	TRAIL 'A' PLAN & PROFILE
37	TRAIL 'F' PLAN & PROFILE
38	TRAIL 'G' PLAN & PROFILE
39	TRAIL 'H' PLAN & PROFILE
40-42	INTERSECTION DETAILS
43-44	OVERLOOK DETAILS
45-48	GRADING PLANS
49-55	SIGN PLAN AND STRIPING DETAILS
56-59	FENCING AND GATE PLAN AND DETAILS
60-62	LANDSCAPING PLAN AND DETAILS
63-70	CULVERT DETAILS
71-72	MISCELLANEOUS DETAILS
73-74	VAULT TOILET DETAILS
75-76	CONCRETE DETAILS
77	BOLLARD DETAILS
A01-A09	PAVILION
S1-S4	PAVILION RETAINING WALL
S5-S10	PAVILION STRUCTURE DETAILS
S11-S18	BRIDGE CROSSING SHEETS
E1-E10	ELECTRICAL





PLANS PREPARED BY:



IN COOPERATION WITH:









AREA MAP

No Scale

ovnoncion igint	ove it	alternate
expansion joint finished grade	exp. jt. FG	and
foot (measurement)	ft. or '	
galvanized gage (gauge)	galv. ga.	and so forth (et cetera) approximate
hexagon	hex.	asphalt
inside diameter	nex. ID	at
invert	Inv.	Begin vertical curve elevation
Invert elevation	IE	Begin vertical curve station
left	LT	bench mark
length of curve	L	centerline
lump sum	LS	corrugated
miles	m	corrugated metal pipe
maximum	max.	cubic yard
minute(s) (angular) minimum	' , min.	cubic feet
miscellaneous	misc.	culvert
monument	mon.	curve delta
normal crown	nc	degree
north	N	diameter
number	no.	drawing(s)
outside diameter	OD	east
pavement	pvmt.	elevation
percent	pct. or %	Engineer(s)
perforate	perf.	End vertical curve elevation
point of compound curve	PCC	End vertical curve station
point of curve	PC	excavation
point on curve	POC	expansion joint
point of intersection	PI	finished grade
point of reverse curve	PRC	foot (measurement)
point on tangent	POT	galvanized gage (gauge)
point of tangent	PT	hexagon
point of vertical intersection	PVI	inside diameter
quantities	quant.	invert
radius	R	Invert elevation
radius point	RAD PT.	left
required	regd.	length of curve
right	RT [']	lump sum
right-of-way	R/W	miles
road	rd.	maximum
second (angular)	п	minute(s) (angular) minimum
sidewalk	s/w	miscellaneous
south	S	monument
specification	spec.	normal crown
square	sq	north
square foot	ft ² , ft2 or sf	number
standard	std	outside diameter
station	STA	pavement
superelevation rate	е	percent
symmetrical	sym.	perforate
tangent	tan.	point of compound curve
temporary bench mark	TBM	point of curve
top back of curb	TBC	point on curve
typical	typ	point of intersection
vertical curve length	VĊ	point of reverse curve
	VDI	Later on recent

alt.
&
etc.
approx. asph.
@
BVCE
BVCS
BM
CL, C/L
corr. CMP
CY
ft ³ , cf
culv.
Δ
°, deg.
dia., D, Ø drwg(s).
urwg(s). E
elev., el.
engr(s).
EVCE
EVCS
exc. exp. jt.
FG
ft. or '
galv. ga. hex.
ID
Inv. IE
LT
L
LS
m
max.
min.
misc.
mon.
nc
N
no. OD
pvmt.
pct. or %
perf.
PCC
PC

POC

PRC

POT

PT

PVI

quant.

PΙ

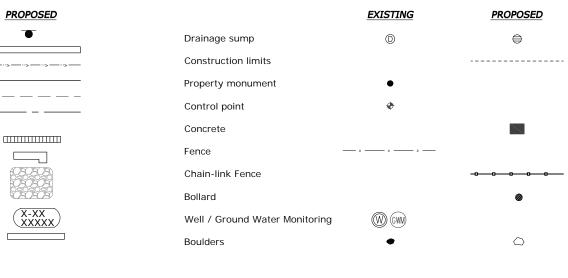
point on tangent

point of vertical intersection

point of tangent

quantities

	EXISTING
Signs	$\overline{\bigcirc}$
Retaining wall	N/A
Ditch	>>>
Edge of asphalt	
Edge of gravel	
Road centerline Bridge	
Stairs	
Building	
Riprap	N/A
Layout point coordinate	N/A
Culvert	
Minor contour	
Major contour	
Natural gas line	NG NG
Overhead power line	OHP
Underground power line	UGP
Fiber optic line	FO
Underground telephone line	ust ust
Underground television line	utv
Existing power pole	\mathcal{O}
Utility box	
Existing ditch	>>>
Existing vegetation	* 0
Right-of-way line	R/W
Curb and gutter	
Ribbon Curb	



GENERAL NOTES

- DISPOSAL: All materials designated for removal become the property of the Contractor and are to be disposed of by removing from project site in an environmentally safe manner in accordance with all Local, State and Federal requirements.
- EXCAVATION: It is estimated that 2604 cy of excavation and 880 cy of embankment will be required for the trail construction; 4232 cy of excavation and 1918 cy of embankment will be required for the parking area construction; and 3891 cy of excavation and 5102 cy of embankment will be required for the access road construction.
- EMBANKMENT: Estimated embankment quantities are "in-place" without adjustment for shrink/swell. Estimated quantities do not include the embankment volume to replace voids from topsoil removed and conserved during construction. Embankment is considered incidental to the Excavation.
- 4. EXISTING CONDITIONS: The contractor shall verify all dimensions and conditions in the field prior to construction and ordering materials. The utility locations shown on the plans are approximate and must be verified by the contractor prior to construction.

BY	DATE	REVISION DESCRIPTION				
			DESIGN	DJL	PROJ. N	o. <u>5943</u>
			DRAWN	DJL	DATE	3/2017
			CHECKED	CA	SURVEYE	D DJ&A

VPI

vertical point of intersection

west



Vegetation

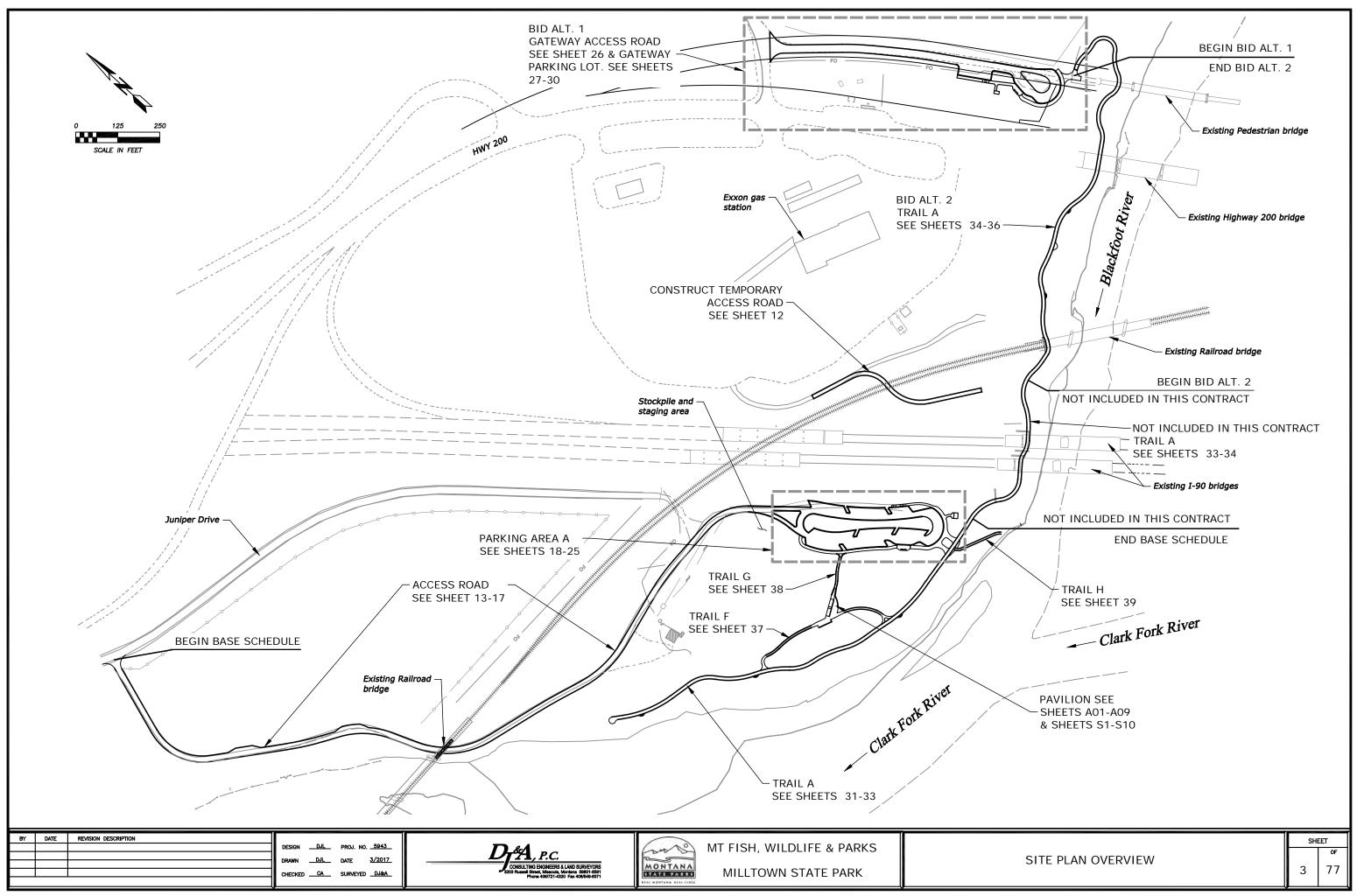


MT FISH, WILDLIFE & PARKS

MILLTOWN STATE PARK

......

GENERAL NOTES LEGEND AND SYMBOLS SHEET OF 77



SCHEDULE OF BID ITEMS

	ITEM NO.	DESCRIPTION	UNIT	Base Bid Schedule	BID ALT. 1	BID ALT. 2
	1	Mobilization, demobilization, bonding and insurance	LS	ALL	ALL	ALL
	2	Soil erosion and pollution control	LS	ALL	ALL	ALL
	3	Contractor testing	LS	ALL	ALL	ALL
	4	Crus hed bas e cours e	CY	1,093	526	214
	5	Choker aggregate	CY	50		50
	6	Subbase course	CY	40	480	32
1	7	Treated aggregate bas e	CY	575		1 1-0
	8	Road, trail, and parking excavation	CY	8,525	1,665	610
	9	Temporary construction access road	LS			ALL
	10	Bituminous surface treatment, 1.5 inch thickness	SY	4,857	-	
H	11	Hot as phalt concrete, 2" compacted depth	SF	56,858	28,200	13,347
	12	As phalt seal coat	SF	Schedule BID ALT. ALL ALL ALL ALL 1,093 528 50 - 40 480 575 - 8,525 1,685 - - 4,857 - 56,858 28,200 80,315 - 762 675 93 231 7,285 4,245 15 3 1,347 335 128 - - 1 437 - - 1 437 - - 1 437 - - 1 4 - - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		-
	13	Concrete curb and gutter	LF	762	675	-
General	14	Concrete ribbon curb	LF	93	231	
	15	Concrete, 4" thickness	SF	7,285	4,245	-
	16	2" dia. conduit sleeves crossing under trail	EA	15	3	1
	17	Topsoil, 4" depth	CY	1,347	335	180
	18	18º dia. metal pipe culvert	LF	128	14 14	0
e	19	24" diam metal pipe culvert	LF	- 8	-	32
ē	20	4 precast sump	EA	-	1	-
O	21	Riprap, Class 6	CY	437	-	
Н	22	Geotextile seperation fabric	SY		41	94
	23	Permanent pavement markings, epoxy	LS	ALL	ALL	- 1-
	24	Sign system	EA	20	10	13
	25	Fence, 6' chain link, epoxy coated	LF	2,349		4
	26	Install road closure gate	EA	1	V -4 -1	- 98
	27	Chain link double swing gate with locking mechanism	EA	3	-	
	28	Install interpretive displays/signs	EA	4		2
	. 29	Pre-cast concrete single vault toilet	EA		1	- 4
	30	Pre-cast concrete double vault toilet	EA	1	1	
	31	Removable bollard	EA		-	3
	32	Equipment Rental, large dump truck	HR	24		i i
	33	Equipment Rental, excavator with thumb	HR	24	7 38 1	
	34	Willow cuttings, harvest and plant	LF	150		
	35	Seeding, hydroseed method	ACRE	2.6	0.6	0.3
	38	Site lighting and electric service	LS	ALL	ALL	ALL
	37	Mis cellaneous work	EA	25,000		-

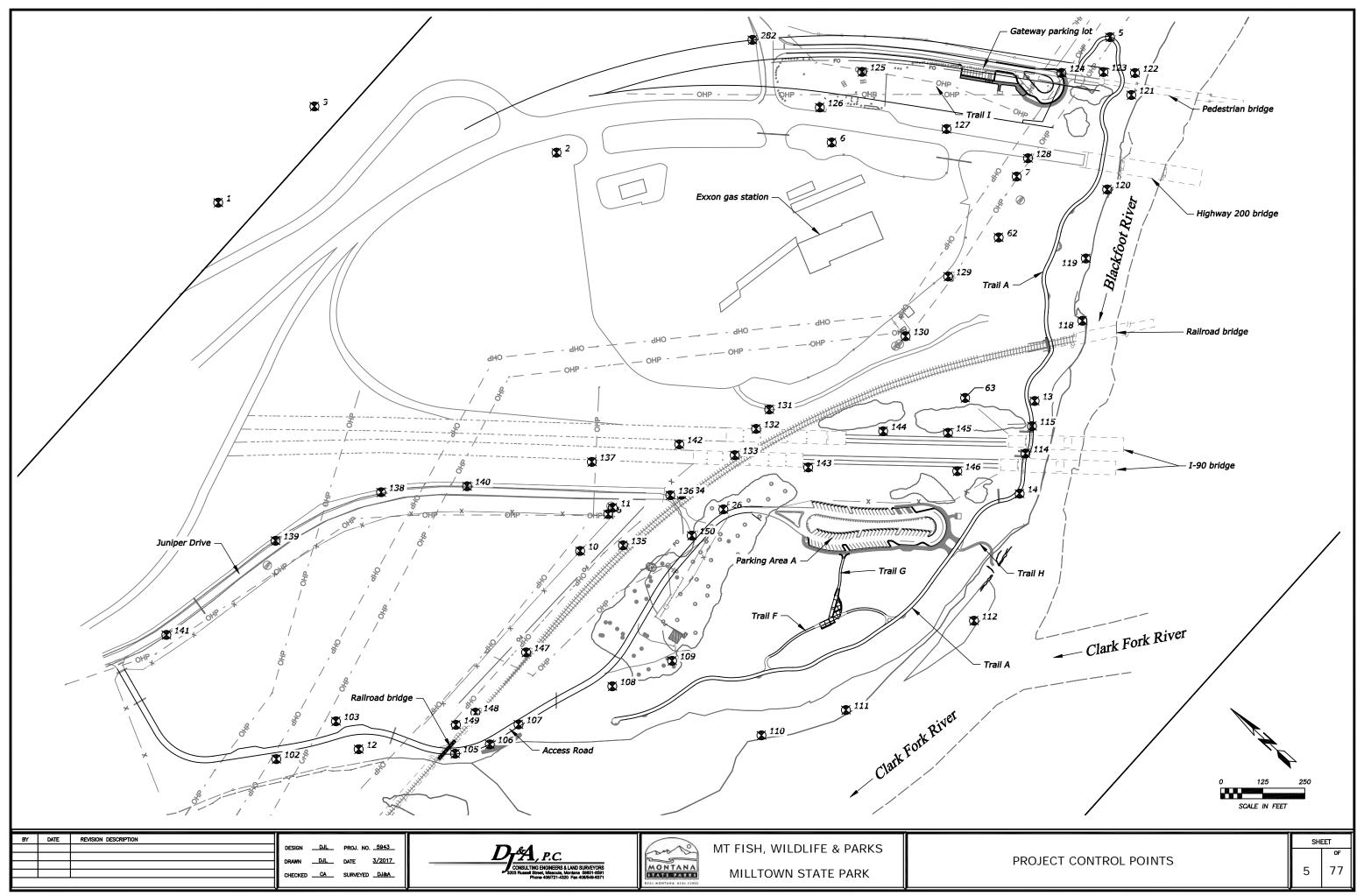
	ITEM NO.	DESCRIPTION	UNIT	Base Bid Schedule	BID ALT. 1	BID ALT. 2
	38	Precast Concrete Caps	LF	142	0	0
	39	Tumbled Brick Veneer	SF	588	0	0
BRIDGES ARCHITECTURAL	40	2x8 T&G Decking on Ceiling with Finish	SF	1,615	0	0
	41	1/2" Sheathing	SF	1,615	0	0
	42	Glulams (8 x 12) with Finis h	MBF	0.91	0.00	0
	43	Curved Glulam (8 x 12) with Finis h	MBF	0.42	0.00	0
	44	Glulam Rafters (2-1.2 x 9) with Finish	EA	9.00	0.00	0
	45	Glulam Rafters (2-1.2x 12) with Finis h	EA	15.00	0.00	0
	48	Glulam Columns & Hardware (8 x 8) with Finish	MBF	0.63	0.00	0
	47	Glulam Benches w/ Finish	LF	37	0	0
	48	2" Rigid Insulation	SF	1,615	0	0
	49	30# Felt	SF	1,615	0	0
	50	Standing Seam Metal Roofing	SF	1,615	0	0
	51	Roof Flas hing	LF	237	0	0
	52	Gutters (Galvanized)	LF	82.5	0.0	0
	53	Downspouts (Galvanized)	LF	45	0	0
	54	Misic. Fasteners and Steel Connections	LS	1	0	0
	55	Reinforced Concrete Wall	CY	55	0	0
	58	Concrete Sidewalk, reinforced	SF	2,340	0	0
	57	Structure excavation	CY	0	0	140
	58	Auger cast piling- 2.5 ft	LF	0	0	303
co	59	Precast concrete lagging	SF	0	0	651
iii	60	Concrete Drain	LF	0	0	76
ŏ	61	Structural steel - misc. (roof structures)	LS	ALL	0	ALL
盈	62	Furnish steel pile (HP12x53)	LF	0	0	118
	63	Furnish steel pile HP14x89)	LF	0	0	117
₫	64	Furnish steel pile (W 18x143)	LF	0	0	81
2	65	Fence, 4' chain link, epoxy coated	LF	0	0	90
	66	Pipe relocate	EA	0	0	0
I-90 MRL BRIDGES	67	Retaining wall - gabion wall	CY	0	0	0
ĭ	68	Fence, 4' chain link, epoxy coated	LF	0	0	0

BY	DATE	REVISION DESCRIPTION			
			DESIGN	DJL	PROJ. NO. <u>5943</u>
			DRAWN	CA	DATE <u>3/2017</u>
			CHECKED	CA	SURVEYEDDJA



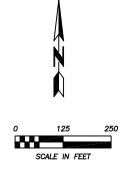
MT FISH, WILDLIFE & PARKS
MILLTOWN STATE PARK

SUMMARY OF ESTIMATED QUANTITIES



CONTROL POINT TABLE						
POINT #	ELEVATION	NORTHING	EASTING	DESCRIPTION		
CP-1	3289.28	17046205.22	917545.87	FND*-iron-pin		
CP-2	3285.25	17045557.59	918329.07	FND-3.25		
CP-3	3292.07	17046184.35	917949.66	FND-AC-2		
CP-4	3303.71	17046058.23	920204.94	FND-AC-3.25		
CP-5	3270.14	17044565.04	919684.71	FND-PLASTIC CAP*-1.25-ypc		
CP-6	3280.63	17044969.95	918898.57	FND-AC-2		
CP-7	3270.36	17044493.74	919191.25	FND-5\8		
CP-8	3277.46	17044724.55	917633.19	FND-* 3/4-REBAR		
CP-10	3277.44	17044713.08	917496.09	FND-PLASTIC CAP*-1.25		
CP-11	3277.58	17044727.12	917656.16	FND-3/4		
CP-12	3246.58	17044808.06	916617.73	FND-AC-2		
CP-13	3261.36	17044007.88	918731.16	FND-AC-2.5		
CP-14	3262.85	17043856.50	918496.37	FND-AC-2.5		
CP-26	3276.18	17044479.65	917872.79	FND-AC-1.5		
CP-62	3272.35	17044412.26	919020.85	FND-AC-2		
CP-63	3265.31	17044167.37	918599.83	FND-PLASTIC CAP*-1.5ypc		
CP-102	3270.86	17044970.14	916432.23	SET-BPC		
CP-103	3270.06	17044913.93	916634.19	SET-BPC		
CP-105	3242.76	17044586.24	916799.52	SET-BPC		
CP-106	3245.14	17044528.14	916889.39	SET-BPC		
CP-107	3252.95	17044504.22	916990.34	SET-BPC		
CP-108	3270.10	17044372.89	917261.11	SET-BPC		
CP-109	3273.51	17044291.71	917436.28	SET-BPC		
CP-110	3235.90	17043946.15	917449.25	SET-BPC		
CP-111	3235.83	17043809.79	917673.26	SET-BPC		
CP-112	3236.57	17043704.48	918125.03	SET-BPC		
CP-114	3271.24	17043923.43	918596.75	SET-BPC		
CP-115	3268.35	17043963.49	918670.23	SET-BPC		
CP-118	3239.04	17044061.98	919003.34	SET-BPC		
CP-119	3242.57	17044177.98	919147.74	SET-BPC		
CP-120	3245.61	17044268.25	919342.68	SET-BPC		
CP-121	3252.84	17044402.96	919599.31	SET-BPC		

CONTROL POINT TABLE						
POINT #	ELEVATION	NORTHING	EASTING	DESCRIPTION		
CP-122	3257.89	17044438.46	919655.16	SET-BPC		
CP-123	3272.84	17044510.10	919594.68	SET-BPC		
CP-124	3277.64	17044600.91	919509.23	SET-BPC		
CP-125	3282.69	17045043.36	919115.22	SET-BPC		
CP-126	3284.85	17045065.90	918952.49	SET-BPC		
CP-127	3284.37	17044743.24	919156.78	SET-BPC		
CP-128	3282.91	17044505.23	919254.06	SET-BPC		
CP-129	3273.50	17044446.27	918834.23	SET-BPC		
CP-130	3273.74	17044421.58	918617.54	SET-BPC		
CP-131	3276.77	17044577.01	918184.57	SET-BPC		
CP-132	3277.79	17044567.54	918115.43	SET-BPC		
CP-133	3284.40	17044562.24	918015.14	SET-BPC		
CP-134	3284.22	17044601.17	917821.78	SET-BPC		
CP-135	3283.11	17044629.49	917593.74	SET-BPC		
CP-136	3270.25	17044625.02	917798.44	SET-BPC		
CP-137	3311.10	17044864.42	917716.26	SET-BPC		
CP-138	3277.42	17045269.67	917229.90	SET-BPC		
CP-139	3276.49	17045406.15	916912.92	SET-BPC		
CP-140	3277.88	17045091.65	917414.17	SET-BPC		
CP-141	3276.38	17045460.27	916487.95	SET-BPC		
CP-142	3314.14	17044706.49	917928.55	SET-BPC		
CP-143	3313.81	17044375.61	918134.18	SET-BPC		
CP-144	3310.57	17044282.12	918363.19	SET-BPC		
CP-145	3306.10	17044135.82	918488.69	SET-BPC		
CP-146	3304.68	17044038.90	918422.37	SET-BPC		
CP-147	3281.28	17044630.72	917164.67	SET-BPC		
CP-148	3280.42	17044622.74	916930.69	SET-BPC		
CP-149	3264.19	17044641.60	916865.00	SET-BPC		
CP-150	3275.01	17044497.42	917751.85	SET-BPC		
CP-282	3287.63	17045349.40	918967.59	SET-BPC		



BY	DATE	REVISION DESCRIPTION				
			DESIGN	DJL	PROJ. NO	o. <u>5943</u>
			DRAWN	DJL	DATE	3/2017
			DIVAWN		DAIL	<u>0, 201, </u>
			CHECKED	CA	SURVEYE	D DJ&A

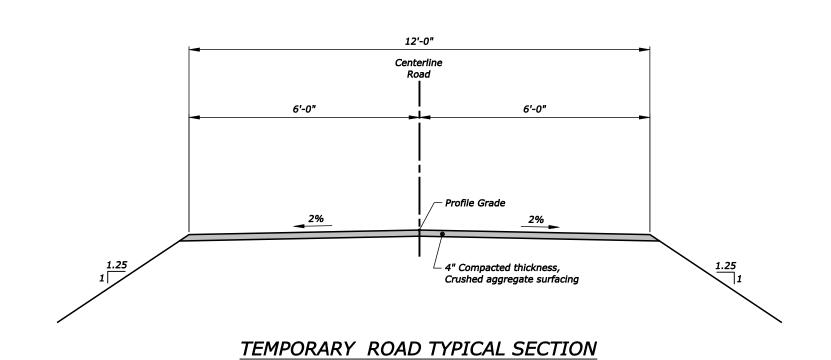




MT FISH, WILDLIFE & PARKS MILLTOWN STATE PARK

PROJECT CONTROL POINTS

6 77

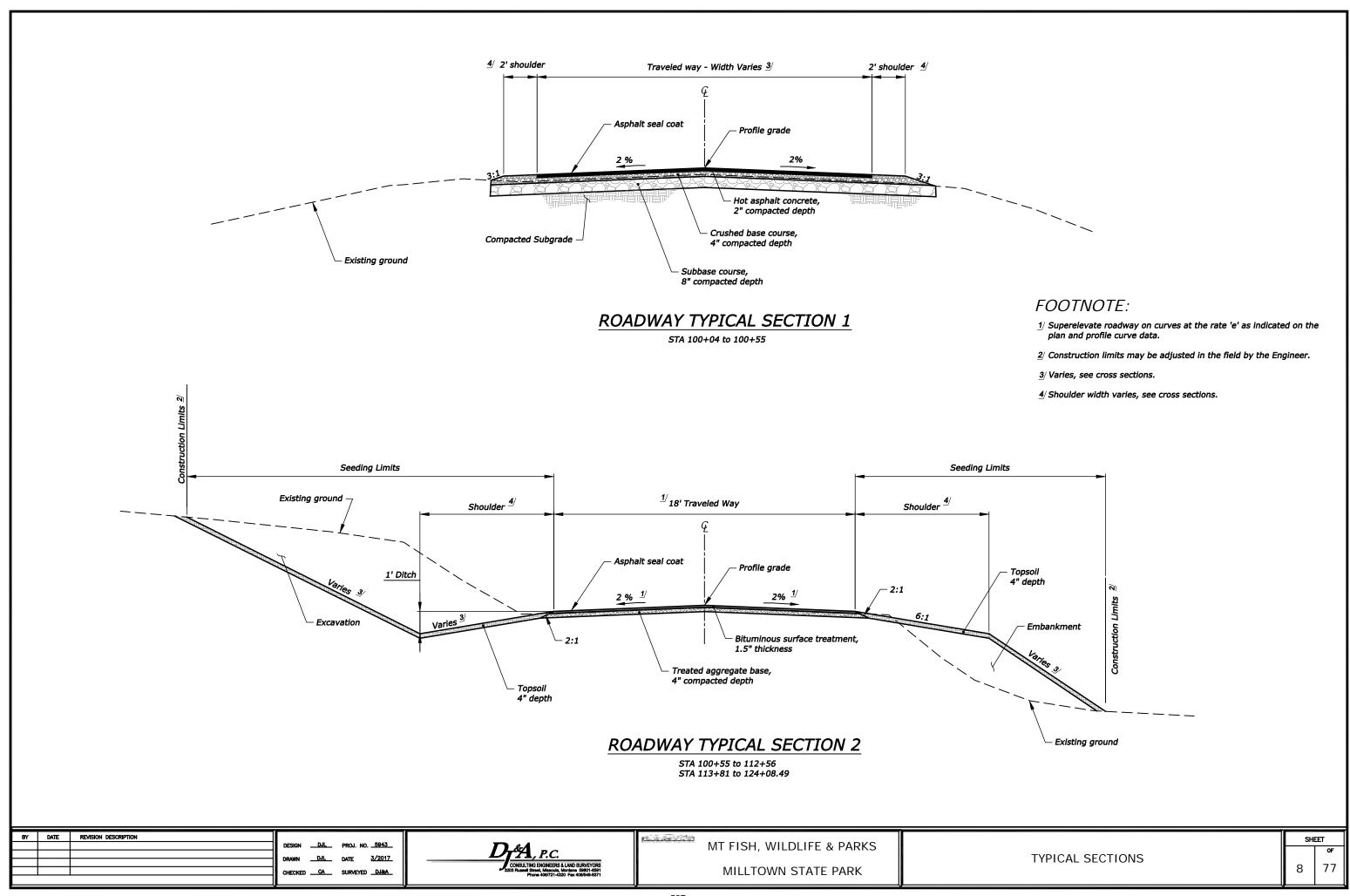


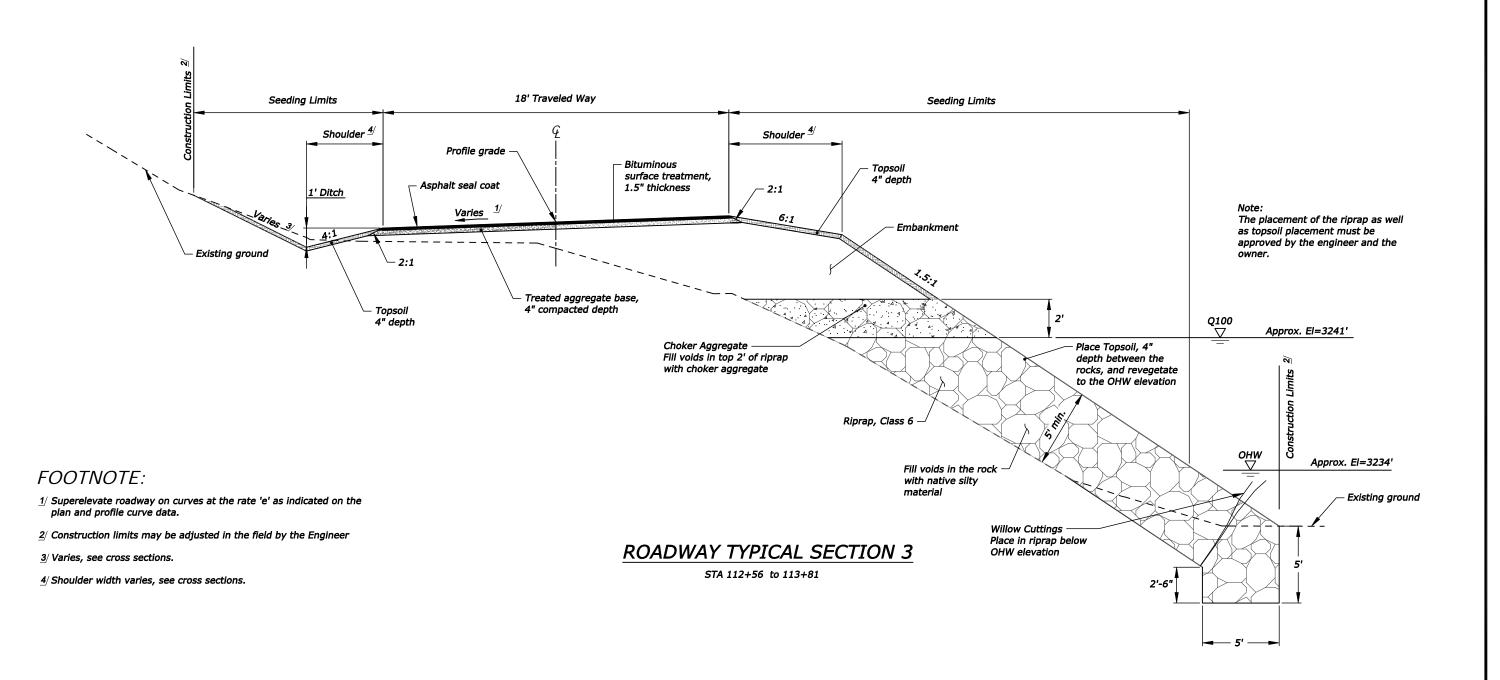
BY	DATE	REVISION DESCRIPTION				
			DESIGN	DJL	PROJ. NO	. <u>5943</u>
			DRAWN	DJL	DATE	3/2017
			DIVAMIN		UNIE	<u> </u>
			CHECKED	CA	SURVEYED	DJ&A





TYPICAL SECTIONS



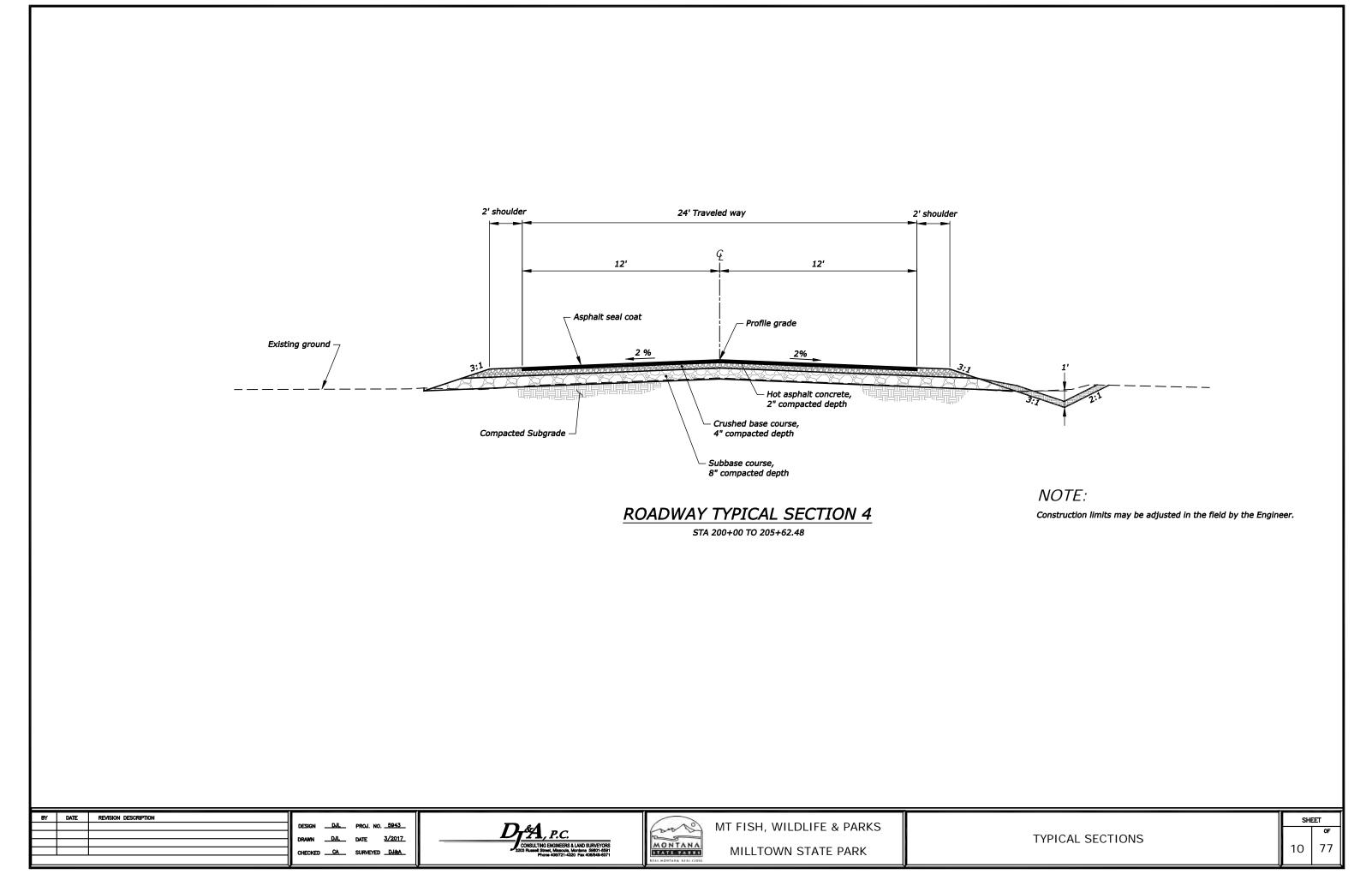


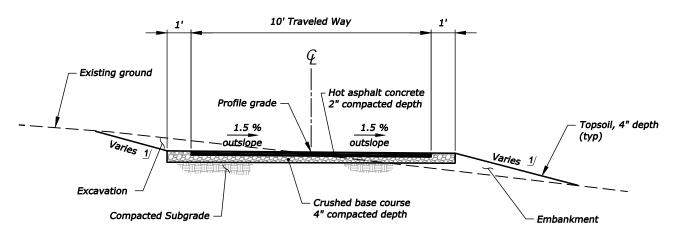
BY	DATE	REVISION DESCRIPTION			
			DESIGN	DJL	PROJ. NO. <u>5943</u>
			DRAWN	DJL	DATE 3/2017
			DIVANIA		UNIC -7
			CHECKED	CA	SURVEYED DJ&A



TYPICAL SECTIONS

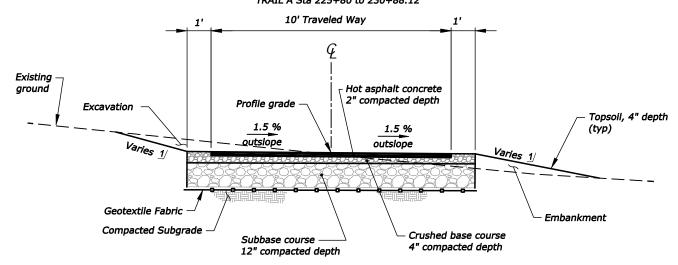
SHEET 0F 9 77





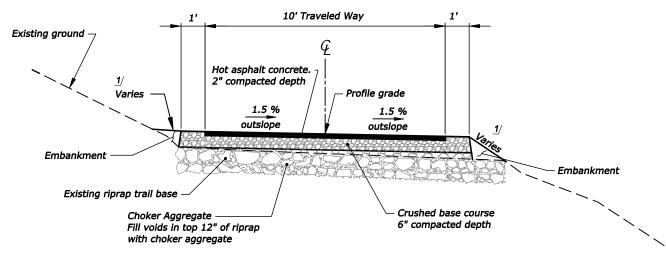
TRAIL TYPICAL SECTION 1A

TRAIL A Sta 200+00 to 213+00 213+00 to 217+50 not included in this contract TRAIL A Sta 218+70 to 224+80 TRAIL A Sta 225+80 to 230+88.12



TRAIL TYPICAL SECTION 1B

TRAIL A Sta 217+50 to 218+00 218+00 to 218+70 not included in this contract



TRAIL TYPICAL SECTION 1C

TRAIL A Sta 224+80 to 225+80

REVISION DESCRIPTION

-





MT FISH, WILDLIFE & PARKS

MILLTOWN STATE PARK

TYPICAL SECTIONS

SHEET 0F 11 77

TRAIL TYPICAL SECTION 2

TRAIL F 2/ TRAIL G 2/

6' <u>1</u>/

– Profile

grade

Hot asphalt concrete
 2" compacted depth

Crushed base course

4" compacted depth

- Embankment

Existing

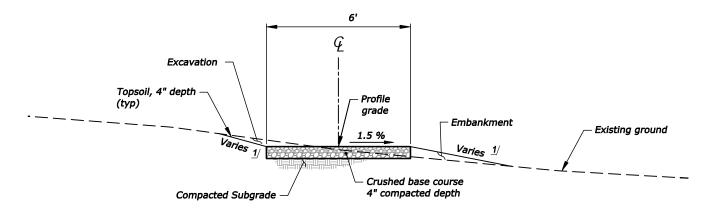
ground

Excavation

Compacted Subgrade

Topsoil, 4" depth

(typ)

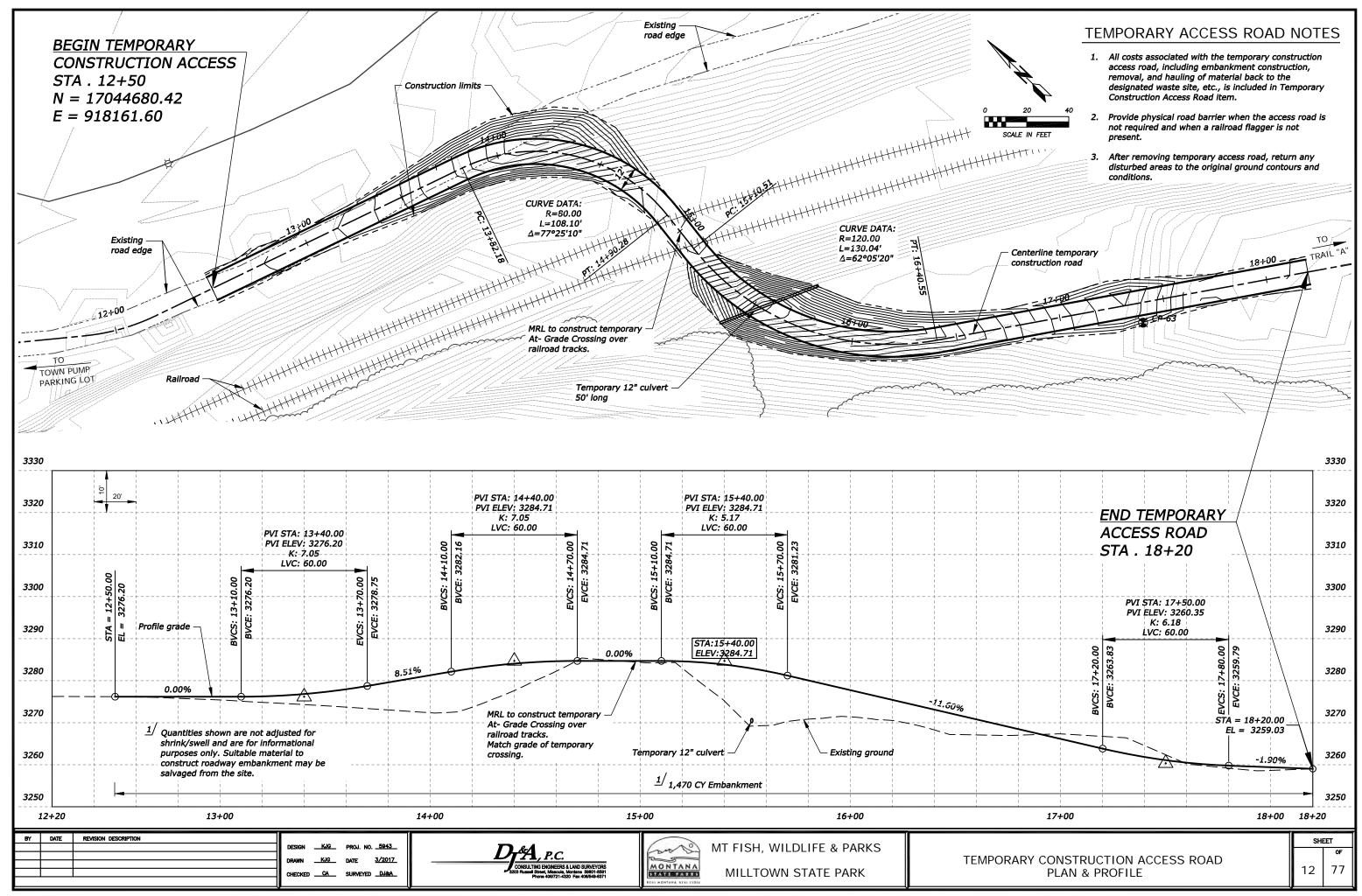


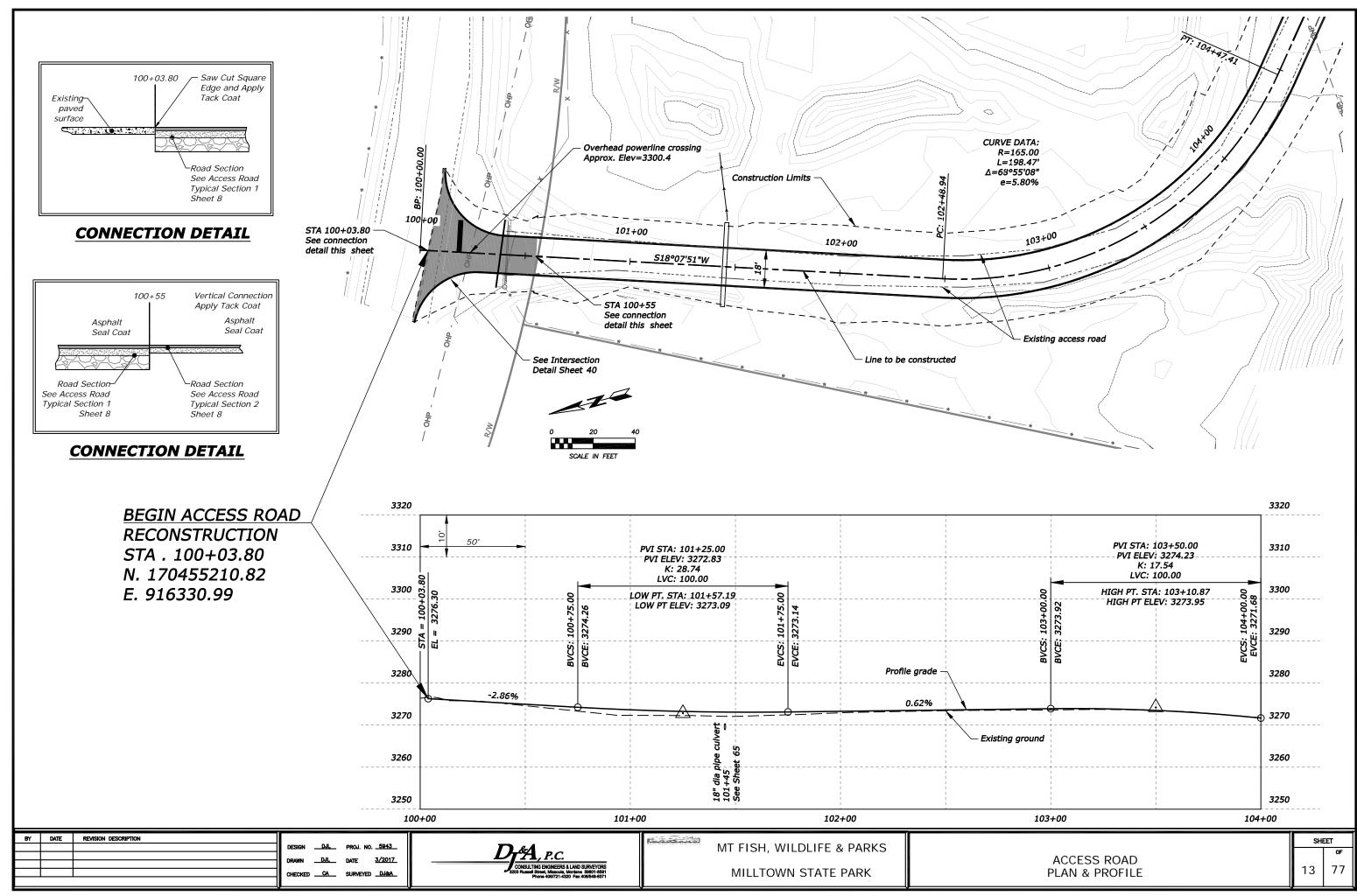
TRAIL TYPICAL SECTION 3

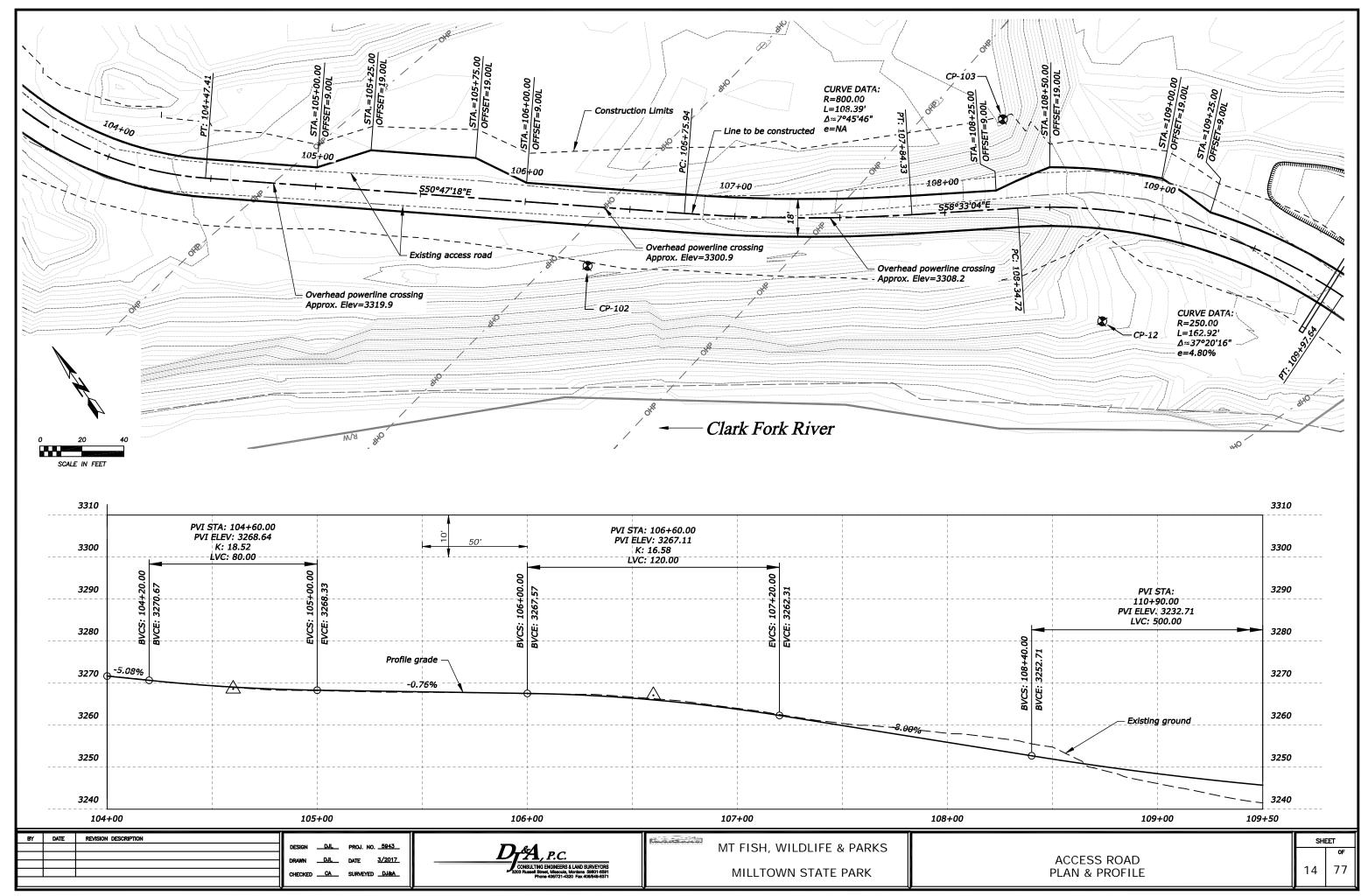
TRAIL H

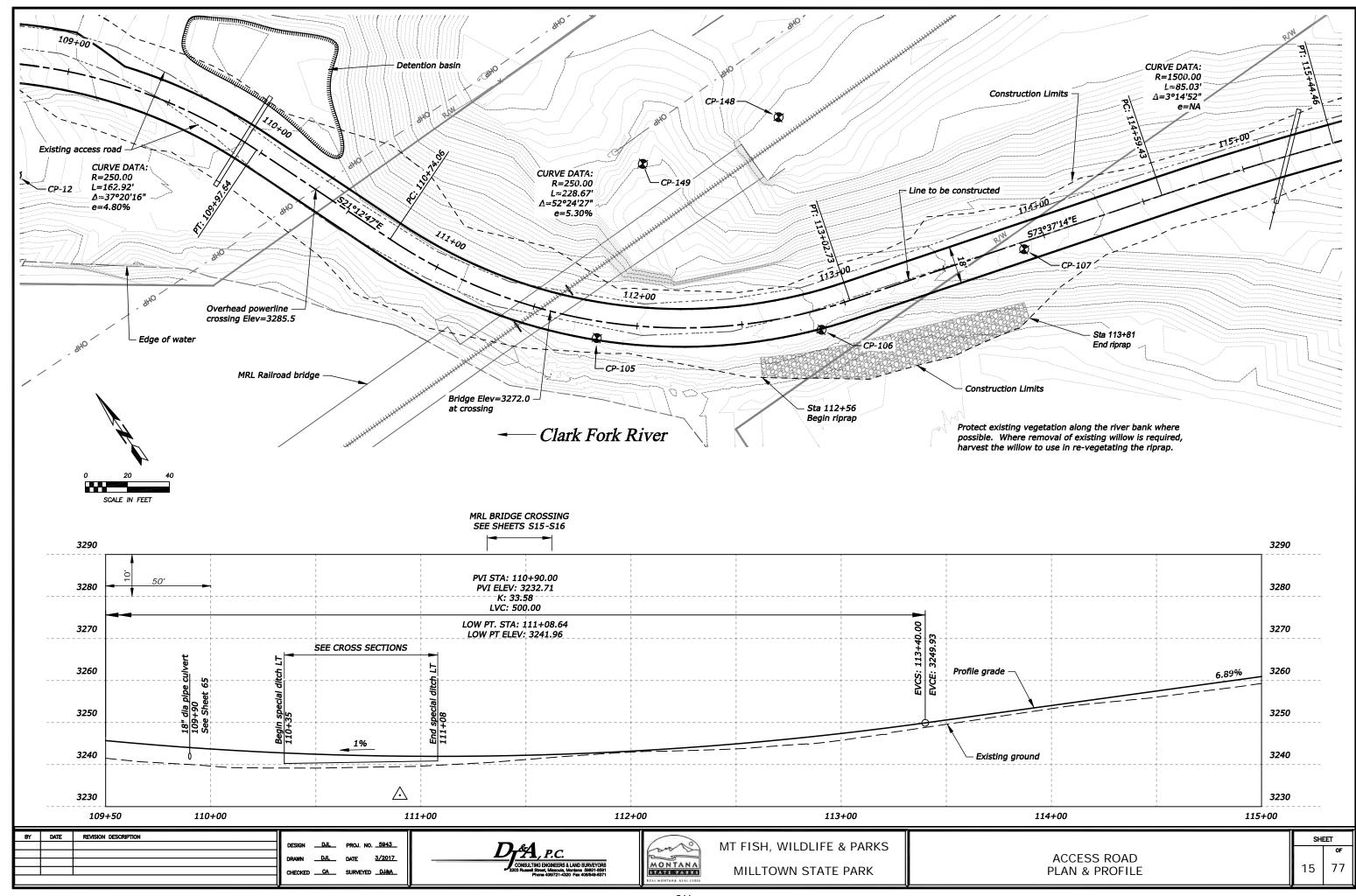
FOOTNOTE:

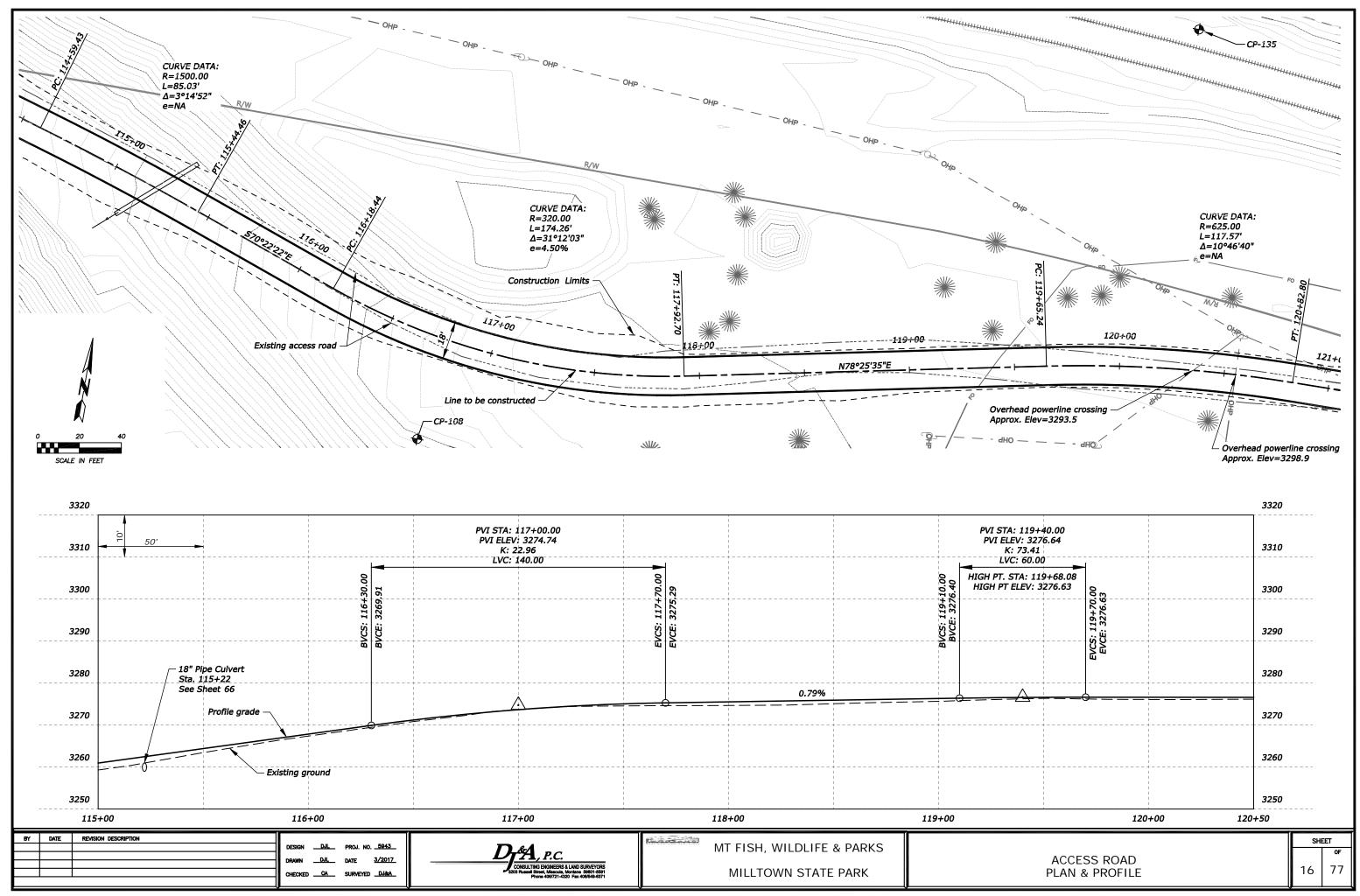
- 1/ See cross sections
- $\underline{\textit{2}}$ See structural drawings Sheets ##-S10 for retaining wall typical sections

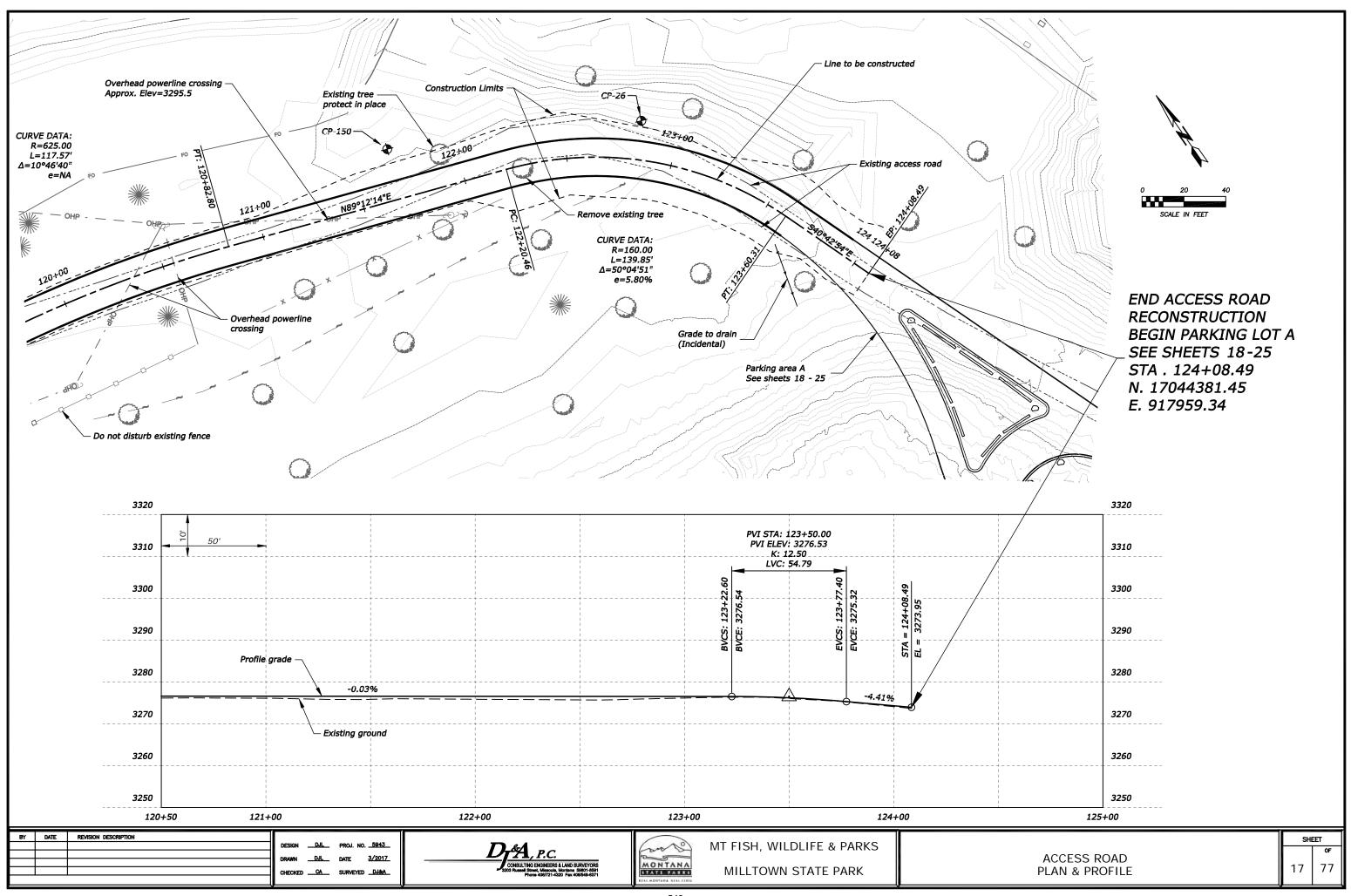


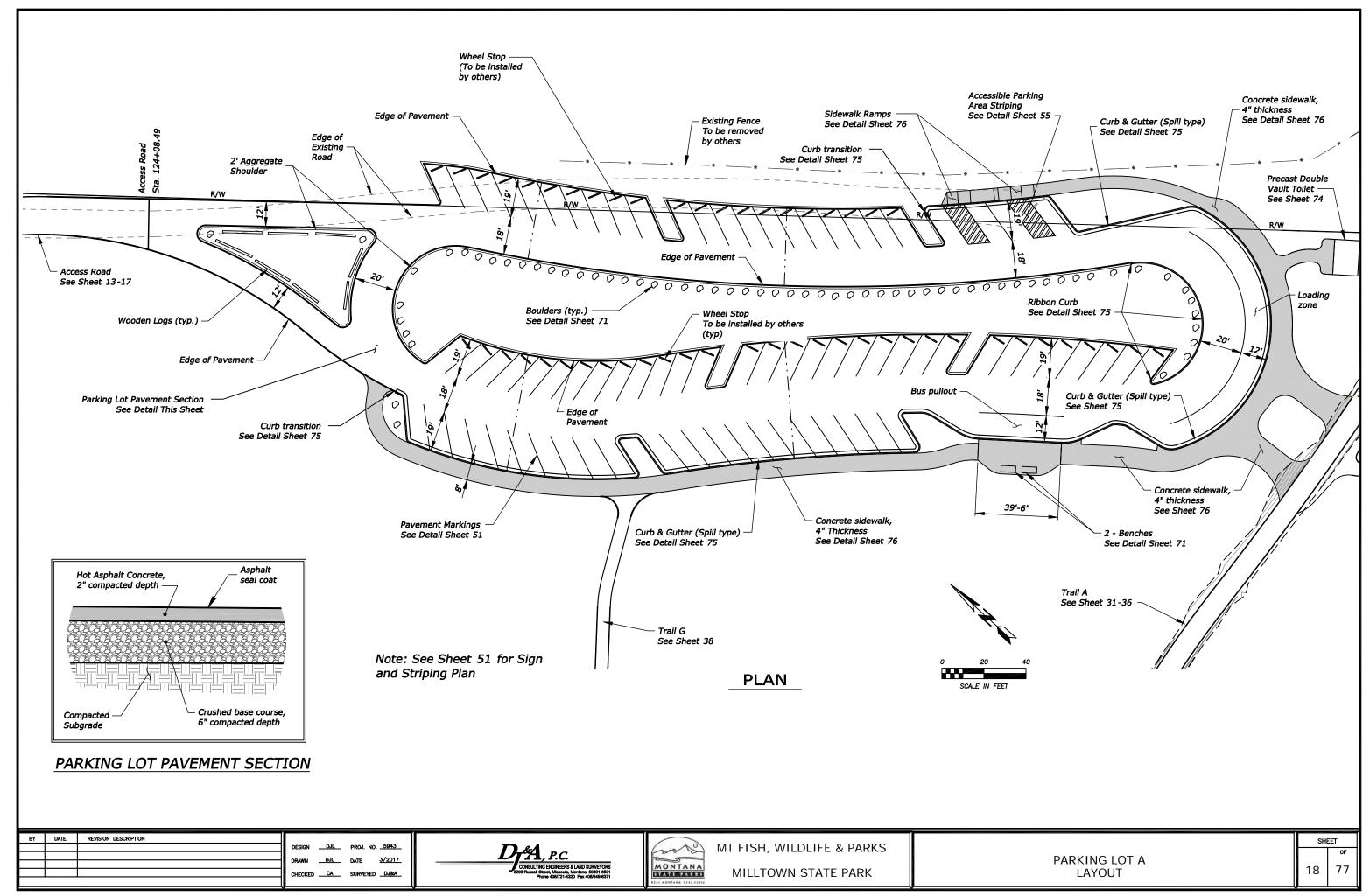


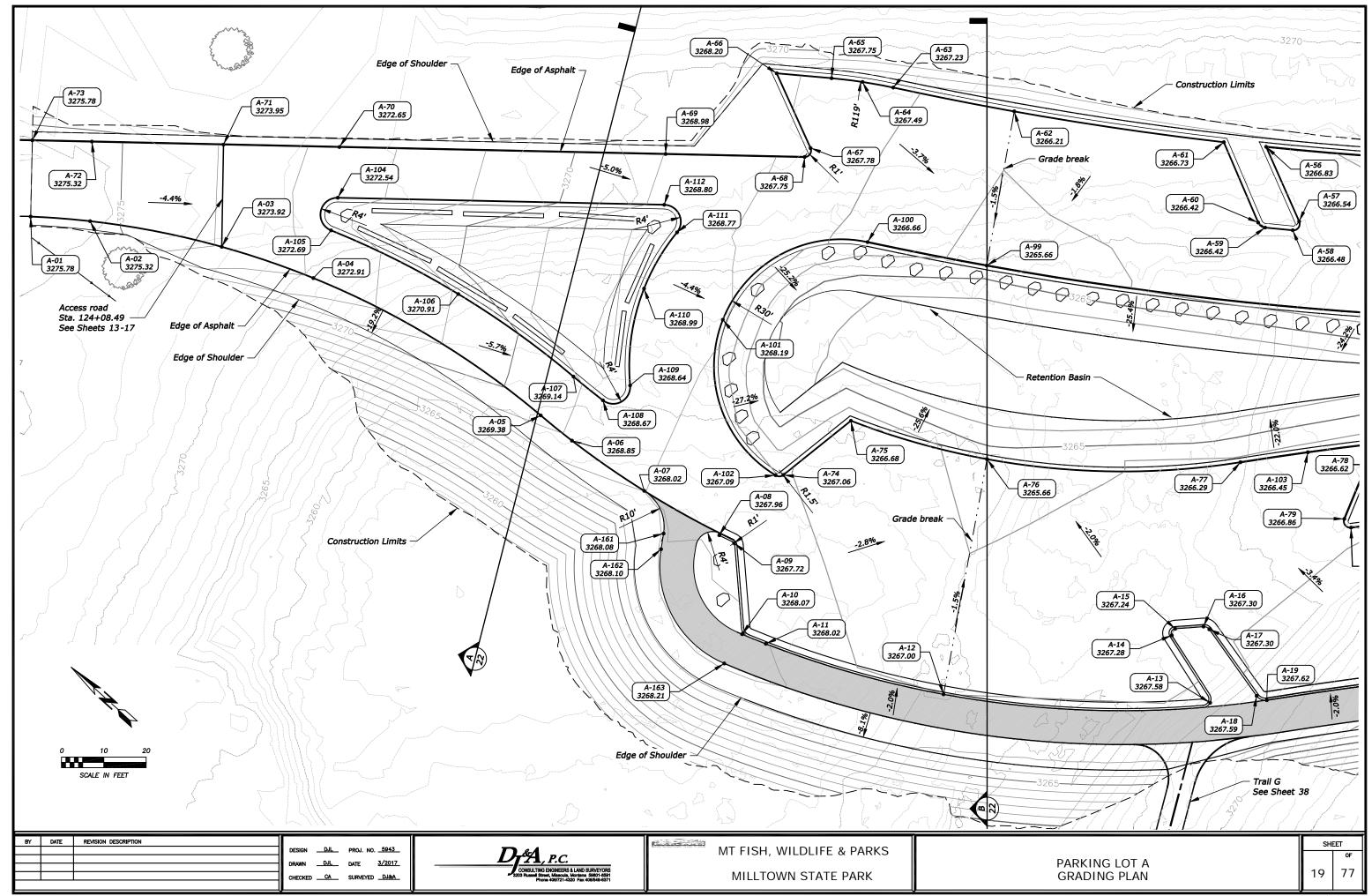


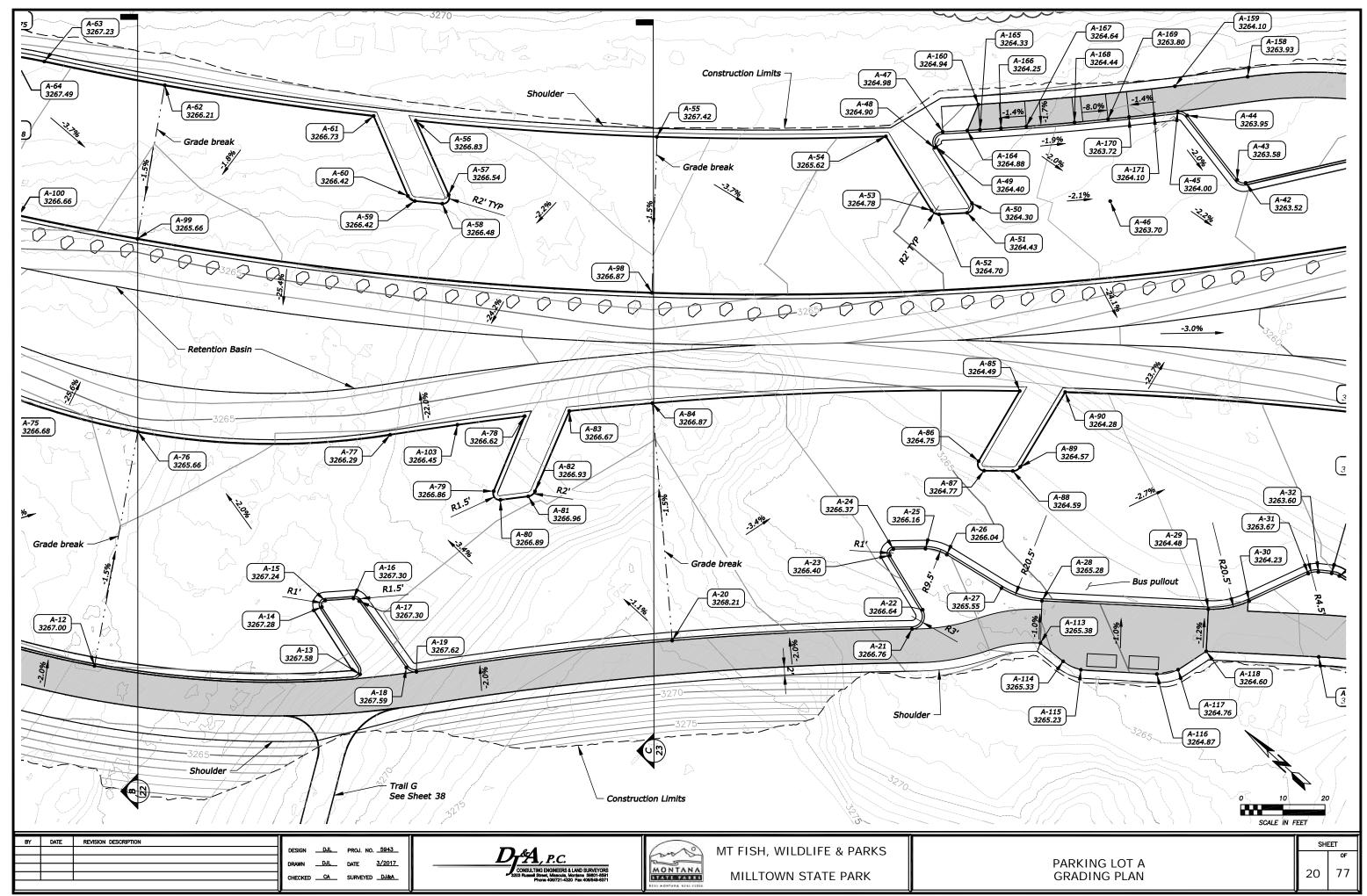


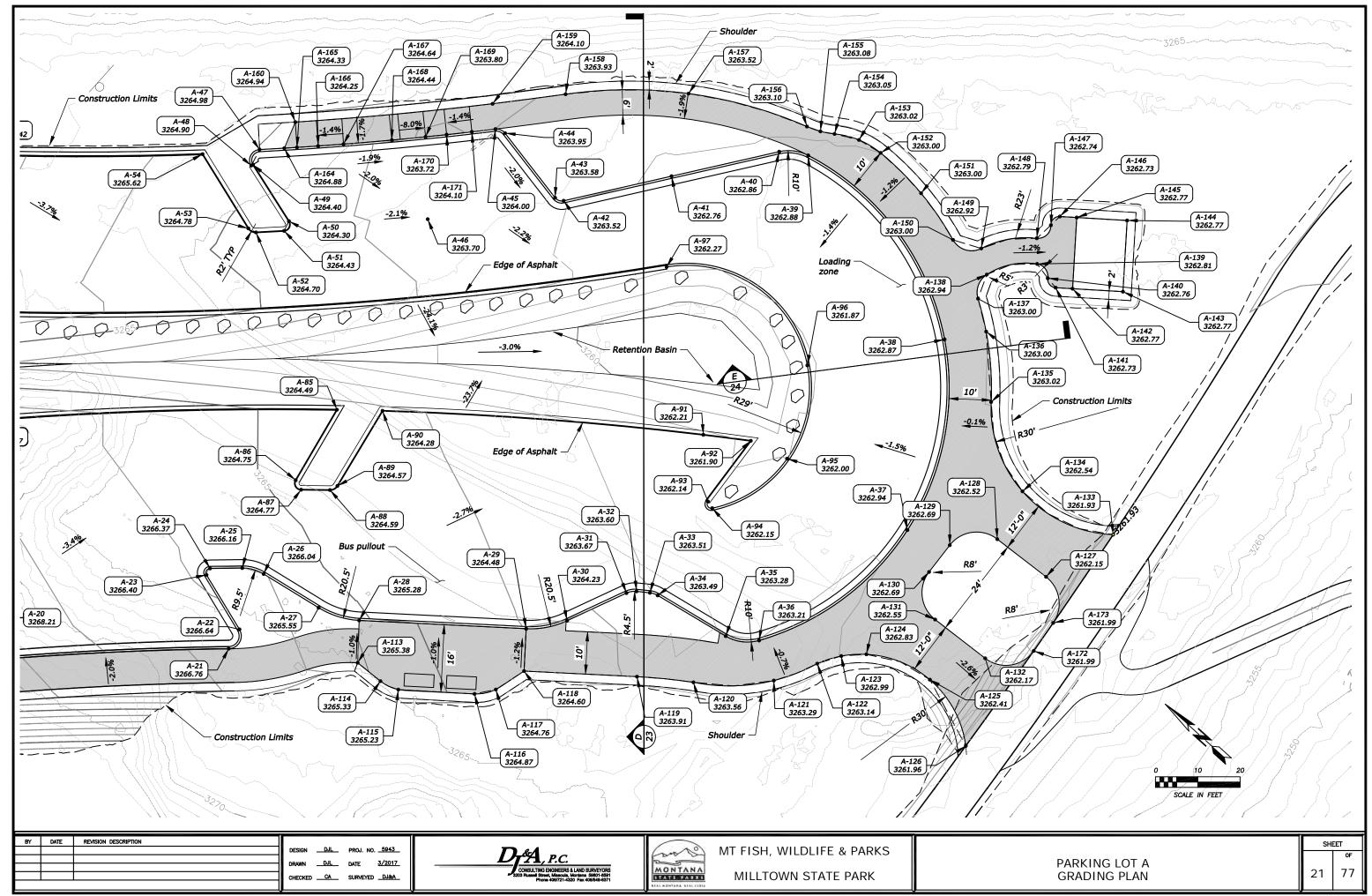


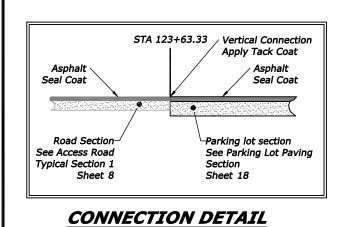


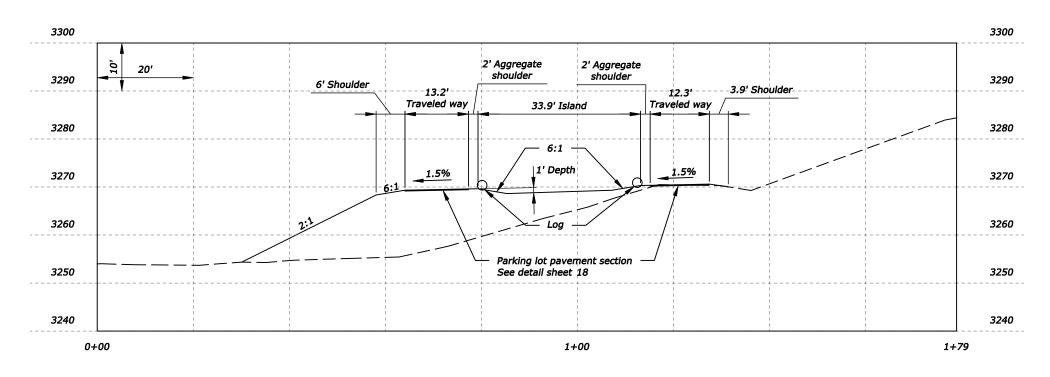




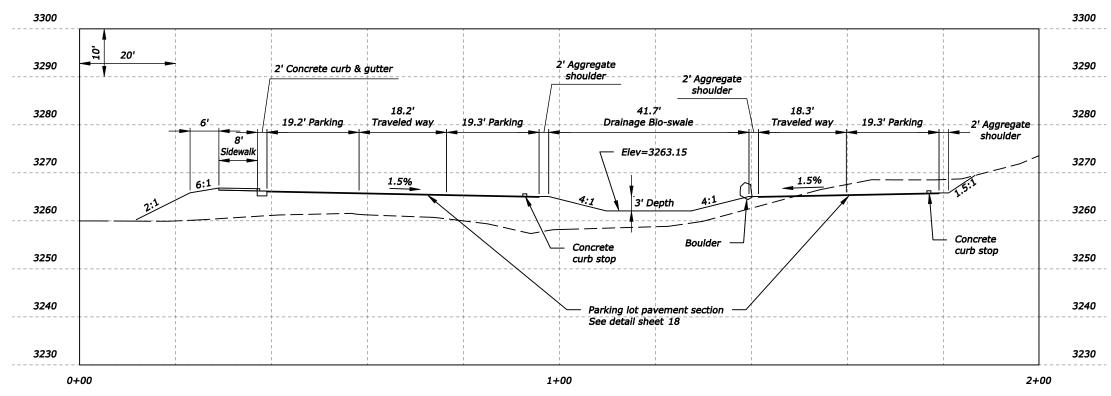








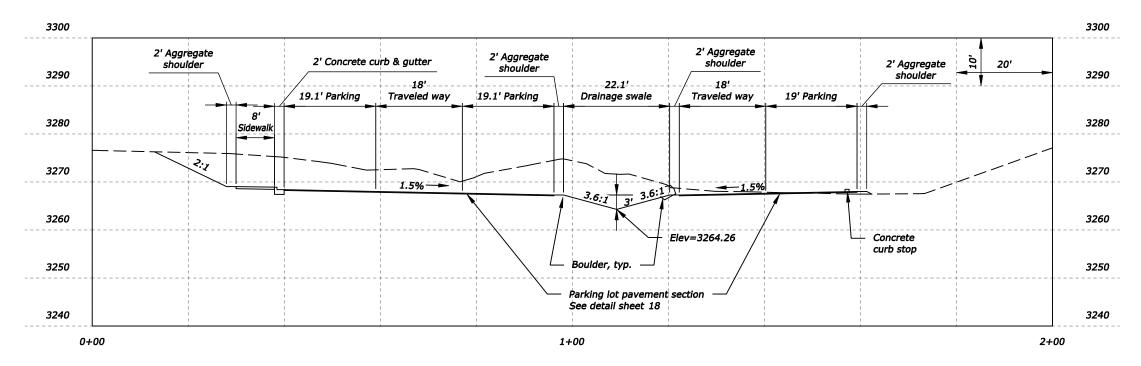




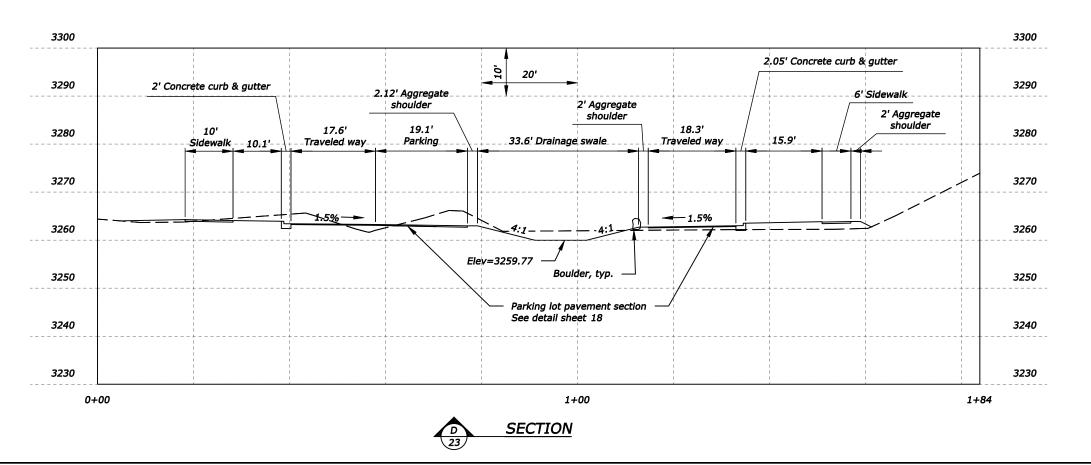


SHEET

BY	DATE	REVISION DESCRIPTION				
			DESIGN <u>DJL</u> PROJ. NO. <u>5943</u>	D-& A	MT FISH, WILDLIFE & PARKS	
_			DRAWN <u>DJL</u> DATE <u>3/2017</u>		MONTANA AND TOWN STATE DADI	PARKING LOT A
			CHECKED <u>CA</u> SURVEYED <u>DJ&A</u>	CONSULTING ENGINEERS & LAND SURVEYORS 3203 Russell Street, Missouls, Montans 58801-5891 Phone 408721-4320 Fax 408/549-8371	MONTANA MILLTOWN STATE PARK	SECTIONS
					BEAL MONTANA BEAL CLOSS	





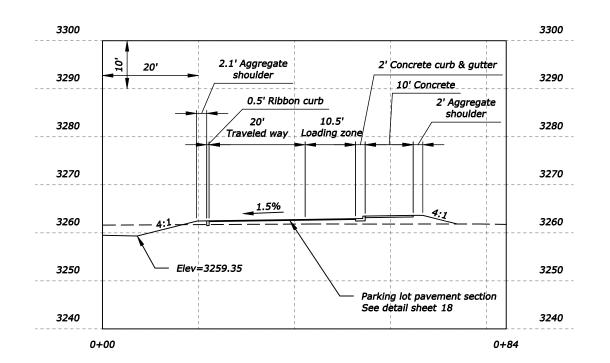


BY	DATE	REVISION DESCRIPTION				
			DESIGN	DJL	PROJ. NO	o. <u>5943</u>
			DRAWN	DJL	DATE	3/2017
			DRAWN		DATE	0/201/
			CHECKED	CA	SURVEYED	D DJ&A





PARKING LOT A SECTIONS SHEET 0F 23 77





BY	DATE	REVISION DESCRIPTION				
			DESIGN	DJL	PROJ. NO	. <u>5943</u>
			DRAWN	DJL	DATE	3/2017
			DIVAMIN		DAIL	<u>0, 201, </u>
			CHECKED	CA	SURVEYED	DJ&A
	-					



ш	(non)
Ш	
ш	
- 18	MONTANA

PARKING LOT A SECTIONS

DOTALE #	NORTHING	EASTING.	50 51 51 41 75011	2566277770
POINT #	NORTHING	EASTING	FG ELEVATION	DESCRIPTION
A-01	17044409.7983	917923.0324	3275.78	PC
A-02	17044398.6266	917931.6209	3275.32	POC
A-03	17044371.4671	917947.9340	3273.92	POC
A-04	17044350.4439	917956.9316	3272.91	POC
A-05	17044288.8382	917968.7617	3269.38	PRC
A-06	17044279.3575	917969.2790	3268.85	POC
A-07	17044258.7327	917971.8823	3268.02	POC
A-08	17044238.5472	917975.9387	3267.96	TBC
A-09	17044234.7215	917976.8996	3267.72	ТВС РТ
A-10	17044218.9148	917962.1969	3268.07	ТВС
A-11	17044213.2402	917964.2586	3268.02	TBC POC
A-12	17044174.0551	917983.4895	3267.00	ТВС РОС
A-13	17044125.9244	918024.1419	3267.58	TBC PT
A-14	17044143.3140	918029.9273	3267.28	TBC PC
A-15	17044143.7570	918031.5897	3267.24	TBC PT
A-16	17044139.1055	918036.4528	3267.30	TBC PC
A-17	17044137.6804	918036.8962	3267.30	TBC PT
A-18	17044118.8460	918032.6874	3267.59	TBC PC
A-19	17044116.3764	918033.5313	3267.62	TBC PCC
A-20	17044076.2755	918079.5968	3268.21	TBC POC
A-21	17044035.8537	918119.6933	3266.76	TBC PC
A-22	17044037.0202	918124.7674	3266.64	TBC PT
A-23	17044051.4162	918129.1139	3266.40	TBC PC
A-24	17044051.8091	918130.8008	3266.37	TBC PCC
A-25	17044046.2140	918135.9744	3266.16	TBC PCC
A-26	17044041.5203	918138.3111	3266.04	TBC PT
A-27	17044026.5523	918141.0706	3265.55	TBC PC
A-28	17044017.4251	918145.2532	3265.28	TBC PT
A-29	17043986.7904	918170.1972	3264.48	TBC PC
A-30	17043980.8689	918178.0725	3264.23	TBC PT
A-31	17043974.8148	918192.3108	3263.67	TBC PC
A-32	17043973.3121	918194.1964	3263.60	ТВС РТ
A-33	17043970.7369	918196.0594	3263.51	TBC PC
A-34	17043968.9671	918196.8297	3263.49	ТВС РТ
A-35	17043950.6044	918200.4447	3263.28	TBC PC
A-36	17043944.0557	918204.9612	3263.21	TBC PCC
A-37	17043935.4606	918247.7647	3262.94	TBC POC
A-38	17043959.0682	918287.1204	3262.87	ТВС РОС
A-39	17044012.0815	918297.8486	3262.88	TBC PCC
A-40	17044017.7666	918293.9223	3262.86	TBC PT
A-41	17044032.8027	918272.5753	3262.76	TBC POT
A-42	17044047.8389	918251.2284	3263.52	TBC PC
A-43	17044049.8286	918250.4118	3263.58	TBC PT

LAYOUT POINT COORDINATES							
POINT #	NORTHING	EASTING	FG ELEVATION	DESCRIPTION			
A-45	17044071.1558	918253.0369	3264.00	TBC PCC			
A-46	17044068.8006	918226.5192	3263.70	ASPHALT			
A-47	17044109.3074	918212.1634	3264.98	TBC PCC			
A-48	17044108.2474	918208.0403	3264.90	TBC PT			
A-49	17044108.0770	918208.4681	3264.40	PI			
A-50	17044092.8461	918204.2275	3264.30	PC			
A-51	17044092.1518	918201.7695	3264.43	PCC			
A-52	17044096.8446	918197.0534	3264.70	PCC			
A-53	17044098.8162	918196.5518	3264.78	PT			
A-54	17044118.5971	918202.3356	3265.62	PC			
A-55	17044158.8616	918165.9591	3267.42	POC			
A-56	17044203.9350	918130.5628	3266.83	PT			
A-57	17044186.3561	918122.6850	3266.54	PC			
A-58	17044186.0869	918120.1156	3266.48	PCC			
A-59	17044191.3618	918116.2187	3266.42	PCC			
A-60	17044193.3813	918116.0120	3266.42	PT			
A-61	17044212.0976	918124.6857	3266.73	PC			
A-62	17044253.7584	918096.9821	3266.21	POC			
A-63	17044278.7647	918082.0231	3267.23	PCC			
A-64	17044285.0415	918078.1588	3267.49	POC			
A-65	17044291.0691	918073.9163	3267.75	PT			
A-66	17044301.4863	918066.0977	3268.20	PI			
A-67	17044283.7290	918058.3435	3267.78	PC			
A-68	17044283.3497	918055.8329	3267.75	PT			
A-69	17044308.2219	918034.3821	3268.98	POT			
A-70	17044366.5892	917984.0438	3272.65	POT			
A-71	17044387.3221	917966.1628	3273.95	POT			
A-72	17044410.8948	917945.8764	3275.32	POT			
A-73	17044421.5593	917936.6985	3275.78	PI			
A-74	17044236.8415	917996.6326	3267.06	PT			
A-75	17044233.5434	918016.8534	3266.68	PC			
A-76	17044203.5759	918031.6309	3265.66	ASPHALT POC			
A-77	17044158.6023	918071.1406	3266.29	ASPHALT PCC			
A-78	17044137.8597	918095.7702	3266.62	ASPHALT PT			
A-79	17044131.4123	918077.6155	3266.86	ASPHALT PC			
A-80	17044128.8603	918077.1408	3266.89	ASPHALT PCC			
A-81	17044124.5030	918082.1796	3266.96	ASPHALT PCC			
A-82	17044124.1178	918084.1397	3266.93	ASPHALT PT			
A-83	17044130.8049	918103.7354	3266.67	ASPHALT PC			
A-84	17044117.4283	918118.3097	3266.87	ASPHALT POC			
A-85	17044054.6355	918178.7112	3264.49	ASPHALT PT			
A-86	17044050.7252	918159.8466	3264.75	ASPHALT PC			
A-87	17044048.2619	918159.0282	3264.77	ASPHALT PCC			
A-88	17044043.1497	918163.5196	3264.59	ASPHALT PCC			

LAYOUT POINT COORDINATES					
POINT #	NORTHING	EASTING	FG ELEVATION	DESCRIPTION	
A-89	17044042.5004	918165.4087	3264.57	ASPHALT PT	
A-90	17044046.4480	918185.7342	3264.28	ASPHALT PC	
A-91	17043986.3383	918232.2384	3262.21	ASPHALT POC	
A-92	17043977.0653	918238.6872	3261.90	ASPHALT PT	
A-93	17043974.9861	918221.2515	3262.14	TBC PC	
A-94	17043973.1813	918220.7537	3262.15	TBC PCC	
A-95	17043967.8592	918241.2786	3262.00	TBC POC	
A-96	17043979.0670	918260.8706	3261.87	TBC POC	
A-97	17044019.3062	918255.8930	3262.27	TBC PT	
A-98	17044134.9913	918137.6889	3266.87	ASPHALT POC	
A-99	17044234.2342	918065.5528	3265.66	ASPHALT POC	
A-100	17044258.8465	918050.8361	3266.66	ASPHALT PRC	
A-101	17044271.9975	918014.3444	3268.19	ASPHALT POC	
A-102	17044238.1589	917995.3829	3267.09	ASPHALT PCC	
A-103	17044148.3464	918083.5526	3266.45	ASPHALT POC	
A-104	17044358.8668	917974.8732	3272.54	ASPHALT PC	
A-105	17044354.8869	917968.0850	3272.69	ASPHALT PRC	
A-106	17044322.5049	917977.0359	3270.91	ASPHALT POC	
A-107	17044289.2250	917980.7554	3269.14	ASPHALT PRC	
A-108	17044280.2963	917981.2422	3268.67	ASPHALT PCC	
A-109	17044277.8833	917988.1638	3268.64	ASPHALT PRC	
A-110	17044290.7360	918007.3538	3268.99	ASPHALT POC	
A-111	17044293.8315	918022.4165	3268.77	ASPHALT PRC	
A-112	17044300.4365	918025.2502	3268.80	ASPHALT PT	
A-113	17044011.0085	918137.5816	3265.38	SIDEWALK PI	
A-114	17044004.1043	918137.9623	3265.33	SIDEWALK PC	
A-115	17043999.6275	918139.3041	3265.23	SIDEWALK PT	
A-116	17043985.5602	918150.5979	3264.87	SIDEWALK PC	
A-117	17043982.5149	918154.7334	3264.76	SIDEWALK PT	
A-118	17043980.4763	918162.4428	3264.60	SIDEWALK PI	
A-119	17043959.7614	918179.3100	3263.91	SIDEWALK PC	
A-120	17043948.9681	918187.2313	3263.56	SIDEWALK PT	
A-121	17043935.1317	918200.2392	3263.29	SIDEWALK POC	
A-122	17043930.1945	918210.0734	3263.14	SIDEWALK PRC	
A-123	17043927.1751	918215.2121	3262.99	SIDEWALK POC	
A-124	17043923.0252	918219.4900	3262.83	SIDEWALK PCC	
A-125	17043907.8786	918225.0773	3262.41	SIDEWALK POC	
A-126	17043891.1007	918219.1233	3261.96	SIDEWALK PT	
A-127	17043903.7392	918261.4726	3262.15	SIDEWALK PT	
A-128	17043918.2485	918260.3867	3262.52	SIDEWALK PC	
A-129	17043925.6291	918251.8119	3262.69	SIDEWALK PT	
A-130	17043925.0320	918243.8342	3262.69	SIDEWALK PC	
A-131	17043916.4572	918236.4536	3262.55	SIDEWALK PT	
A-132	17043901.5484	918237.5695	3262.17	SIDEWALK PC	

LAYOUT POINT COORDINATES								
POINT #	NORTHING	EASTING	FG ELEVATION	DESCRIPTION				
A-133	17043898.6203	918279.4812	3261.93	SIDEWALK PC				
A-134	17043921.3813	918272.7492	3262.54	SIDEWALK POC				
A-135	17043941.0036	918283.4914	3263.02	SIDEWALK PRC				
A-136	17043953.0038	918295.0717	3263.00	SIDEWALK POC				
A-137	17043959.6400	918299.5672	3263.00	SIDEWALK PRC				
A-138	17043961.8971	918305.1616	3262.94	SIDEWALK PCC				
A-139	17043954.7464	918314.9809	3262.81	SIDEWALK PCC				
A-140	17043950.6437	918314.1697	3262.76	SIDEWALK PRC				
A-141	17043947.7493	918313.7438	3262.73	SIDEWALK PT				
A-142	17043944.6246	918316.2409	3262.77	SIDEWALK PI				
A-143	17043935.3127	918323.6825	3262.77	VAULT TOILET				
A-144	17043945.8214	918336.8323	3262.77	VAULT TOILET				
A-145	17043955.1332	918329.3908	3262.77	SIDEWALK PI				
A-146	17043958.2580	918326.8936	3262.73	SIDEWALK PC				
A-147	17043958.4522	918323.9462	3262.74	SIDEWALK PRC				
A-148	17043958.8706	918319.4289	3262.79	SIDEWALK PRC				
A-149	17043966.9956	918308.8703	3262.92	SIDEWALK PRC				
A-150	17043973.2927	918305.9106	3263.00	SIDEWALK PRC				
A-151	17043986.2900	918309.0537	3263.00	SIDEWALK POC				
A-152	17043999.7788	918309.7337	3263.00	SIDEWALK PCC				
A-153	17044005.6069	918308.5971	3263.02	SIDEWALK POC				
A-154	17044010.8636	918305.7853	3263.05	SIDEWALK PRC				
A-155	17044013.7369	918303.9994	3263.08	SIDEWALK POC				
A-156	17044016.8702	918302.7234	3263.10	SIDEWALK PRC				
A-157	17044042.8705	918289.7998	3263.52	SIDEWALK POC				
A-158	17044064.3375	918270.2498	3263.93	SIDEWALK PT				
A-159	17044075.6405	918257.0232	3264.10	SIDEWALK POT				
A-160	17044107.3799	918222.6322	3264.94	SIDEWALK PI				
A-161	17044248.5987	917967.4605	3268.08	SIDEWALK PT				
A-162	17044246.5632	917964.3099	3268.10	SIDEWALK PT				
A-163	17044217.4335	917954.2353	3268.21	SIDEWALK PT				
A-164	17044105.1874	918216.3119	3264.88	TBC				
A-165	17044103.0851	918218.4520	3264.33	LAYDOWN				
A-166	17044099.5989	918222.0362	3264.25	LAYDOWN				
A-167	17044095.4448	918226.3657	3264.64	TBC				
A-168	17044087.5965	918234.7244	3264.44	TBC				
A-169	17044082.1908	918240.6225	3263.80	LAYDOWN				
A-170	17044078.8422	918244.3355	3263.72	LAYDOWN				
A-171	17044074.8544	918248.8185	3264.10	TBC				
A-172	17043894.2050	918246.5211	3261.99	SIDEWALK PT				
A-173	17043895.2069	918254.5116	3261.99	SIDEWALK PC				

Note: Elevations shown are to Finished Grade unless otherwise noted.

BY	DATE	REVISION DESCRIPTION

 DESIGN
 DJL
 PROJ. NO. <u>5943</u>

 DRAWN
 DJL
 DATE
 3/2017

 CHECKED
 CA
 SURVEYED
 <u>DJ&A</u>



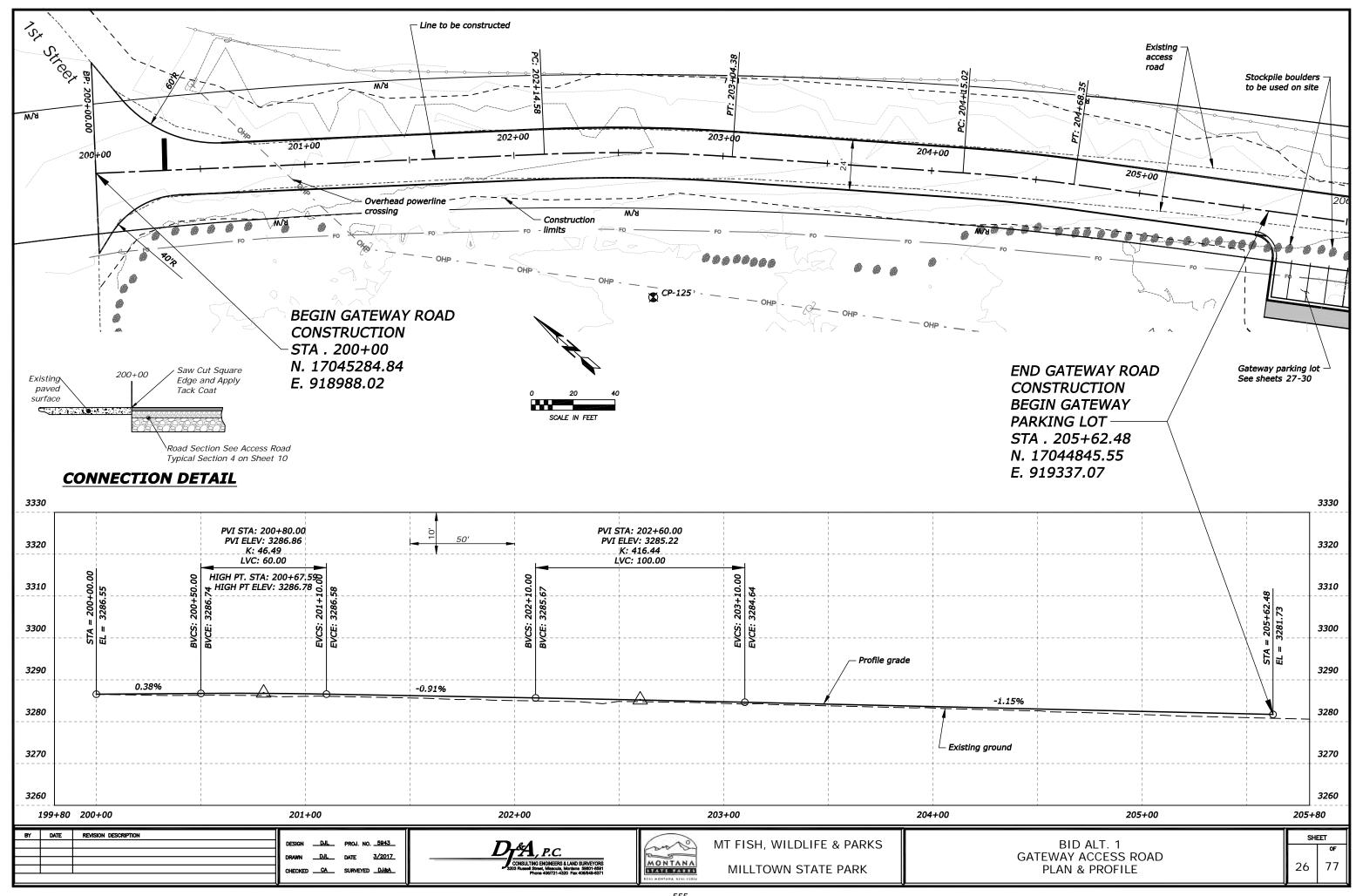


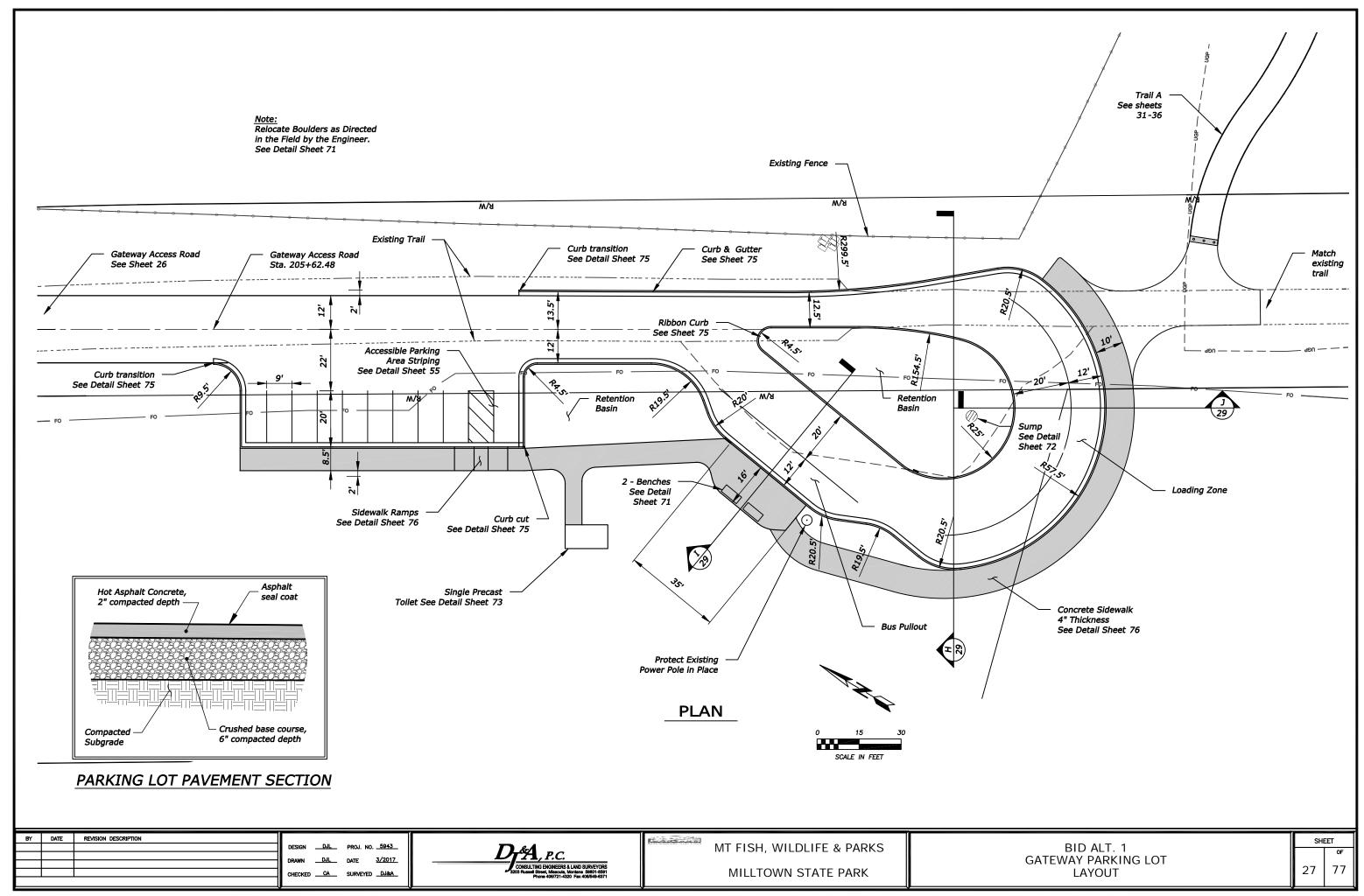
MT FISH, WILDLIFE & PARKS

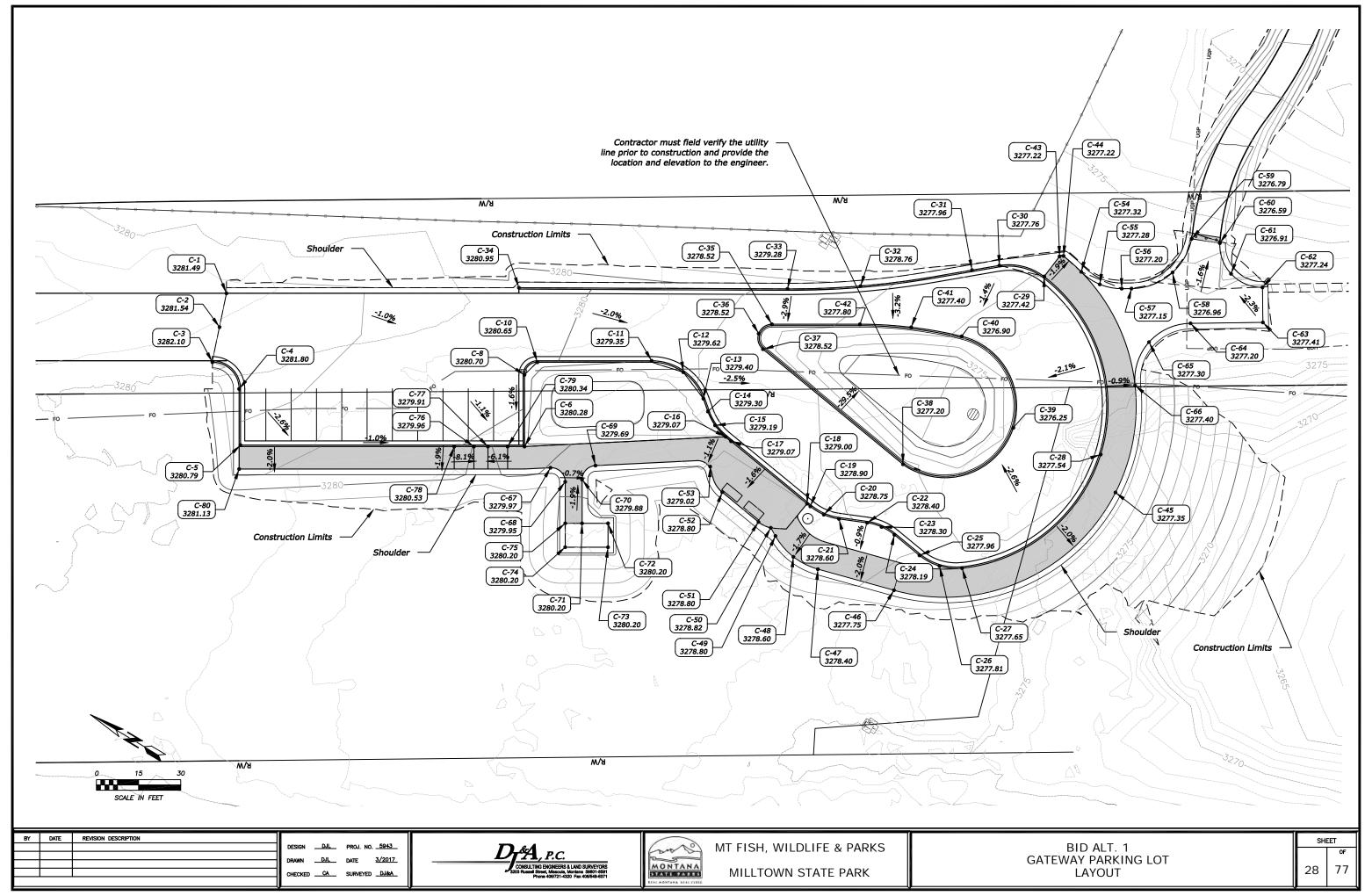
MILLTOWN STATE PARK

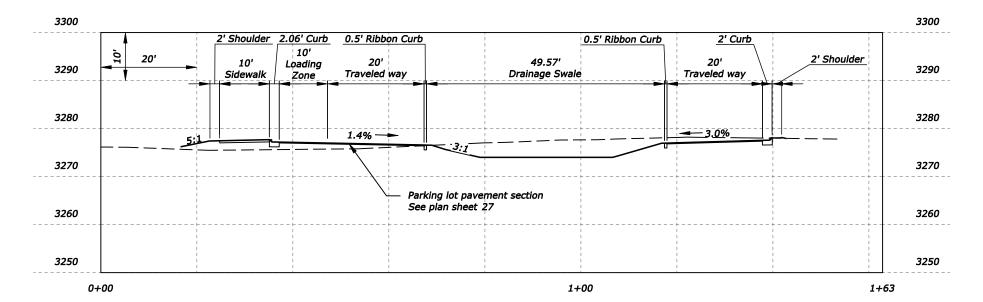
PARKING LOT A COORDINATES

SHEET 0F 25 77

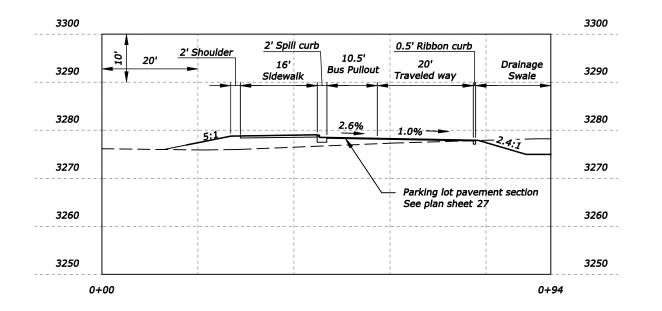


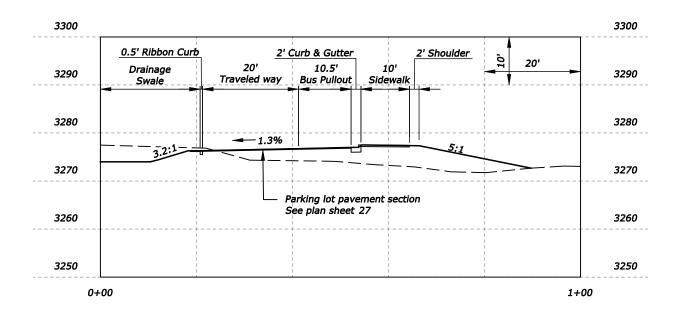














SECTION SECTION

BY	DATE	REVISION DESCRIPTION			Constant of		S	SHE
			DESIGN <u>DJL</u> PROJ. NO. <u>5943</u>		MT FISH, WILDLIFE & PARKS	BID ALT. 1	<u> </u>	
			DRAWN <u>DJL</u> DATE <u>3/2017</u>			GATEWAY PARKING LOT		
			CHECKED <u>CA</u> SURVEYED <u>DJ&A</u>	CONSULTING ENGINEERS & LAND SURVEYORS 3203 Russell Street, Missoula, Montans 58801-8591 Phone 408721-4320 Fax 198049-9371	MILLTOWN STATE PARK	SECTIONS	29	<i>)</i>
				FIIIII 400/21-4320 FBX 4001040-63/1				

LAYOUT POINT COORDINATES							
POINT #	NORTHING	EASTING	FG ELEVATION	DESCRIPTION			
C-1	17044852.0012	919347.1941	3281.49	Asphalt			
C-2	17044847.6342	919335.7423	3281.54	Asphalt			
C-3	17044843.0529	919323.8450	3282.10	Asphalt			
C-4	17044829.9362	919320.9379	3281.80	Asphalt			
C-5	17044818.7675	919304.3394	3280.79	Asphalt			
C-6	17044733.3195	919358.1901	3280.28	ТВС			
C-8	17044747.0256	919379.6924	3280.70	TBC PC			
C-10	17044745.5943	919385.9412	3280.65	TBC PT			
C-11	17044711.5546	919408.2225	3279.35	TBC PC			
C-12	17044699.8915	919410.8338	3279.62	TBC POC			
C-13	17044688.8320	919406.7448	3279.40	TBC PT			
C-14	17044684.9763	919403.7443	3279.30	TBC PC			
C-15	17044680.2008	919400.9707	3279.19	ТВС РОС			
C-16	17044674.8583	919399.5725	3279.07	TBC PT			
C-17	17044672.3766	919399.2711	3279.07	ТВС			
C-18	17044637.6331	919395.0510	3279.00	ТВС			
C-19	17044636.1538	919394.8713	3278.90	TBC PC			
C-20	17044630.5297	919394.9655	3278.75	ТВС РОС			
C-21	17044625.1429	919396.5848	3278.60	ТВС РТ			
C-22	17044615.9622	919400.7912	3278.40	TBC PC			
C-23	17044610.8382	919402.3315	3278.30	ТВС РОС			
C-24	17044605.4884	919402.4211	3278.19	ТВС РТ			
C-25	17044594.0399	919401.0305	3277.96	TBC PC			
C-26	17044585.9866	919401.6554	3277.81	твс тос			
C-27	17044578.7998	919405.3428	3277.65	TBC PCC			
C-28	17044558.9547	919465.9300	3277.54	TBC POC			
C-29	17044609.9291	919508.5035	3277.42	TBC PCC			
C-30	17044625.4691	919503.2625	3277.76	TBC PT			
C-31	17044632.7703	919496.6386	3277.96	TBC PC			
C-32	17044663.1642	919470.5920	3278.76	TBC POC			
C-33	17044684.5563	919455.7559	3279.28	TBC PT			
C-34	17044765.3591	919404.7699	3280.95	ТВС			
C-35	17044682.4771	919442.1640	3278.52	ASPHALT PC			
C-36	17044684.6663	919436.8404	3278.52	ASPHALT POC			
C-37	17044680.3932	919432.9837	3278.52	ASPHALT PT			
C-38	17044616.3965	919425.2104	3277.20	ASPHALT PC			
C-39	17044590.2681	919457.2227	3276.25	ASPHALT POC			
C-40	17044623.2233	919474.8309	3276.90	ASPHALT PCC			
C-41	17044640.1143	919467.8794	3277.40	ASPHALT POC			
C-42	17044656.0703	919458.9892	3277.80	ASPHALT PT			

LAYOUT POINT COORDINATES							
POINT #	NORTHING	EASTING	FG ELEVATION DESCRIPTION				
C-43	17044609.1546	919517.4626	3277.22	SIDEWALK			
C-44	17044608.0574	919518.3714	3277.22	SIDEWALK PC			
C-45	17044547.2509	919457.3726	3277.35	SIDEWALK POC			
C-46	17044595.0133	919385.6995	3277.75	SIDEWALK PT			
C-47	17044621.8752	919377.4734	3278.40	SIDEWALK PC			
C-48	17044631.5927	919376.4928	3278.60	SIDEWALK POC			
C-49	17044640.9443	919379.3103	3278.80	SIDEWALK PT			
C-50	17044643.8975	919380.8826	3278.82	SIDEWALK			
C-51	17044648.7172	919380.2797	3278.80	SIDEWALK			
C-52	17044665.2869	919382.2916	3278.80	SIDEWALK			
C-53	17044673.7879	919387.6513	3279.02	SIDEWALK			
C-54	17044599.7052	919516.9940	3277.32	ASPHALT EDGE			
C-55	17044591.7537	919516.7909	3277.28	ASPHALT EDGE POC			
C-56	17044584.3518	919519.7031	3277.20	ASPHALT EDGE PT			
C-57	17044581.4357	919521.5930	3277.15	ASPHALT EDGE PC			
C-58	17044572.1808	919534.2454	3276.96	ASPHALT EDGE POC			
C-59	17044572.8840	919547.9990	3276.79	ASPHALT EDGE PT			
C-60	17044563.5976	919552.0893	3276.59	ASPHALT EDGE PC			
C-61	17044554.3877	919545.0382	3276.91	ASPHALT EDGE POC			
C-62	17044542.3733	919546.9940	3277.24	ASPHALT EDGE			
C-63	17044535.5372	919536.5511	3277.41	ASPHALT EDGE			
C-64	17044557.0734	919522.4585	3277.20	ASPHALT EDGE PC			
C-65	17044565.9376	919508.8739	3277.30	ASPHALT EDGE POC			
C-66	17044561.8153	919493.1856	3277.40	ASPHALT EDGE PT			
C-67	17044721.4642	919356.7907	3279.97	SIDEWALK			
C-68	17044714.3591	919355.3960	3279.95	SIDEWALK			
C-69	17044708.3883	919366.0440	3279.69	SIDEWALK			
C-70	17044709.7168	919359.2759	3279.88	SIDEWALK			
C-71	17044701.3642	919346.1666	3280.20	SIDEWALK			
C-72	17044693.5800	919351.1263	3280.20	VAULT CORNER			
C-73	17044689.0125	919343.9578	3280.20	VAULT CORNER			
C-74	17044701.8569	919335.7739	3280.20	VAULT CORNER			
C-75	17044706.4243	919342.9425	3280.20	VAULT CORNER			
C-76	17044748.5000	919348.5178	3279.96	TBC LAYDOWN			
C-77	17044744.2832	919351.2045	3279.91	TBC LAYDOWN			
C-78	17044754.4035	919344.7563	3280.53	ТВС РОТ			
C-79	17044738.3797	919354.9660	3280.34	TBC POT			
C-80	17044814.6217	919296.9022	3281.13	SIDEWALK			

Note: Elevations shown are to Finished Grade unless otherwise noted.

BY	DATE	REVISION DESCRIPTION			
			DESIGN	DJL	PROJ. NO. <u>5943</u>
			DRAWN	DJL	DATE 3/2017
			Divini		DAIL
			CHECKED	CA	SURVEYEDDJ&A_



MT FISH, WILDLIFE & PARKS

MILLTOWN STATE PARK

BID ALT. 1 GATEWAY PARKING LOT COORDINATES SHEET OF 30 77